



Danish Ministry of the Environment  
Environmental Protection Agency

# Survey of biocidal products in Den- mark

Environmental Project No. 1486, 2013

**Title:**

Survey of biocidal products in Denmark

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**Published by:**

Danish Environmental Protection Agency  
Strandgade 29  
1401 Copenhagen K  
Denmark  
[www.mst.dk](http://www.mst.dk)

**Year:**

2013

**ISBN no.**

978-87-93026-19-3

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# Preface

The Danish Environmental Protection Agency (DEPA) has initiated this survey with the aims of establishing an overview of biocidal products marketed in Denmark grouped by biocidal product type, and to provide information on the possible import of biocidal active substances in treated articles from countries outside the EU.

The survey forms part of the basis for the administration of Regulation 528/2012 of 22 May 2012 concerning the making available on the market and use of biocidal products (the Biocidal Product Regulation, BPR) which come into force in 2013, replacing Directive 98/8/EC (the Biocidal Product Directive, BPD).

The major outputs of the survey are confidential lists of biocidal products marketed in Denmark and a confidential report for DEPA on the market of biocidal products in Denmark. The present report consists of a summary of the non-confidential information and information on biocidal active substances in imported articles.

The survey has been undertaken from October to December 2012 by COWI A/S and has been steered by a Steering Group consisting of:

- Niels Bukholt, Lone Søderberg and Nanna Kildsig, Danish Environmental Protection Agency
- Jakob Maag and Carsten Lassen, COWI A/S

# Summary and conclusions

For the purposes of the administration of Regulation 528/2012 of 22 May 2012 concerning the making available on the market and use of biocidal products (the Biocidal Products Regulation), which comes into force in September 2013 and replaces the Biocidal Product Directive and parts of the Danish legislation, the Danish Environmental Protection Agency (DEPA) launched a survey designed to give an overview of biocidal products on the Danish market and possible biocidal active substances in treated articles imported from countries outside the EU.

The survey of biocidal products marketed in Denmark is based on data on biocidal products registered in the Danish Product Registry, biocidal products subject to authorization schemes which are administered by DEPA and the Danish Veterinary and Food Administration, a questionnaire survey comprising market actors in key sectors and interviews of selected distributors and users of biocidal products.

The data retrieval in the Danish Product Registry was based on a list of active substances covered by the review program under the Biocidal Product Directive (Annex II to Commission Regulation No. 1451/2007) and Annex I and IA to the Biocidal Product Directive, excluding substances for which a decision of non-inclusion into Annex I or Ia of the Biocidal Product Directive has been adopted (included in consolidated "non inclusion list" for all reviewed product types). The list contained in total 274 active substances. Of these, 123 active substances were registered in 931 biocidal products in the Danish Product Registry. The active substances were also registered in a large number of treated articles (e.g. paint with active substances to protect surface film) and in total 167 active substances were registered in one or more mixtures in the registry. Some of the registered active substances may also have other functions in the mixtures. Within many of the product types, a large number of biocidal products were placed on the market. PT2 (private area and public health area disinfectants and other biocidal products) was the largest product type with 420 registered biocidal products with 84 different active substances. The supplementary questionnaire survey showed that a number of biocidal products are not registered in the Product Registry or included in the list of biocidal products approved by DEPA and the survey of the market furthermore indicated that some market actors do not notify the biocidal products to the Product Registry. In total, 4 of the active substances identified by the questionnaire survey were not included in biocidal products registered in the Product Registry or included in the list of biocidal products approved by DEPA.

A list of treated articles was established on the basis of existing studies of active substances in treated articles and technical data sheets from manufacturers of biocidal products. Based on the list it was examined which commodity codes in the trade statistics that could cover the treated articles, and data on import of these items to Denmark from other EU Member States and countries outside the EU was retrieved from the database of Eurostat. It was furthermore assessed how likely it is that the articles covered by the individual commodity codes actually contain biocidal active substances. For many groups of articles, it is known that some biocidal products are marketed for use in these articles, but it will probably only be a small part of the articles which actually contain active substances. This concern for example active substances incorporated into plastics to protect the surface against the growth of microorganisms which in principle can be used in many types of articles. Articles that may potentially contain active substances, and which are in particular imported from countries outside the EU, include articles of plastics containing active substances to prevent degradation of substances in plastics and microbial growth of the surface (such as products made of soft PVC with a degradable plasticizer), plastic products with an anti-bacterial surface (including hy-

gienic surfaces of various kitchen utensils and appliances), cleaning supplies, office supplies, consumer electronics, and textiles with antibacterial agents to prevent odour.

It has not been possible to identify surveys of biocidal active substances in treated articles imported from countries outside the EU. It is known that the Indian market for specialty biocides, which typically include the active substances which will be present in imported articles (textiles, plastics, etc.), is dominated by major international manufactures of biocidal products, which offer the same types of biocidal products, which are used in Europe or North America. The report contains a list of active substances placed on the market from these players in the Asian markets. The market for disinfectants in India is to a higher extent dominated by local producers. As concerns the use of inorganic biocidal products for wood preservation and protection against sapstain, less information has been identified, and some local producers may use biocidal products, which are not used in the EU today. The major international manufacturers operate also in the Southeast Asian market and in China, but China hosts also a large number of small, local producers of biocidal products. In China, a permit system for biocidal products and a database of approved biocidal products exist. The database can be searched via the Internet, but the CAS numbers of the active substances are not indicated, and it has within the limits of this project not been possible to establish an overview of the approved biocidal products, and to what extent the approved biocidal products correspond to biocidal products actually used.

A list of 119 biocidal products marketed in Asia has been generated. The list includes in total 29 different active substances; all of which are included in the review programme under the Biocidal Product Directive. Compared with the recorded 123 active substances in biocidal products in the Danish Product Registry, the list is estimated to constitute only a small part of the active substances that can actually be present in imported articles.

A closer analysis of the active substances which may occur in imported articles will either involve extensive laboratory analysis of imported articles, or a more thorough survey of the market for biocidal products in the countries where the articles are imported from. The latter should include searches in the local languages and involvement of experts with local knowledge.

# Sammenfatning på dansk

Med henblik på administrationen af Forordning 528/2012 af 22. maj 2012 om tilgængeliggørelse på markedet og anvendelse af biocidholdige produkter (Biocidforordningen), som træder i kraft september 2013 og erstatter Biociddirektivet og dele af den danske lovgivning på området, har Miljøstyrelsen igangsat en kortlægning, som skal give et overblik over biocidmidler på det danske marked samt mulige aktivstoffer i behandlede artikler importeret fra lande uden for EU. Kortlægningen er gennemført af COWI A/S i perioden oktober til december 2012.

Kortlægningen af biocidmidler markedsført i Danmark er baseret på data om biocidmidler registreret i Produktregistret, biocidmidler omfattet af godkendelsesordninger, som administreres af Miljøstyrelsen og Fødevarestyrelsen, en spørgeskemaundersøgelse omfattende aktører inden for centrale brancher samt interviews af udvalgte distributører og brugere af biocidmidler. Hovedparten af denne del af kortlægningen er rapporteret som en fortrolig rapport til Miljøstyrelsen og vil ikke være tilgængelig for offentligheden.

Nærværende rapport indeholder en sammenfatning af ikke-fortrolige oplysninger.

Søgningen i Produktregistret omfattede en liste på 274 aktivstoffer omfattet af vurderingsprogrammet under Biociddirektivet (Bilag II til kommissionsforordning Nr 1451/2007) og Bilag I og IA til Biociddirektivet - fraregnet stoffer som ikke længere er tilladte og optræder på Biociddirektivets negativliste ("non inclusion list"). Af disse var 123 aktivstoffer registreret i 931 biocidmidler i Produktregistret. Aktivstofferne optrådte også i et stort antal behandlede artikler (f.eks. maling med aktivstoffer til beskyttelse af overfladefilm), og samlet kunne 167 af aktivstofferne findes i én eller flere blandinger i registret. Nogle af de registrerede aktivstoffer kan også have andre funktioner i blandingerne. Inden for mange af produkttyperne markedsføres et stort antal biocidmidler. PT2, desinfektionsmidler til private og offentlige arealer, var den største produkttype med 424 registrerede biocidmidler indeholdende 84 forskellige aktivstoffer. Den supplerende spørgeskemaundersøgelse viste, at der var en del biocidmidler, som ikke er registreret i Produktregistret, og undersøgelsen af markedet viste endvidere, at der tilsyneladende er grupper af aktører, der kun i meget lille grad registrerer midlerne i Produktregistret. Der blev i spørgeskemaundersøgelsen oplyst 4 aktivstoffer, som ikke er indeholdt i biocidmidler registreret i Produktregistret eller omfattet af listen over biocidmidler godkendt af Miljøstyrelsen.

En liste over behandlede artikler blev etableret ud fra viden i litteraturen herunder producenternes anvisninger på, hvilke behandlede artikler, som de markedsførte biocidmidler kan anvendes i. På basis af listen blev det undersøgt, hvilke varenumre i handelsstatistikken som kunne dække de behandlede artikler, og der blev lavet et udtræk på import fra henholdsvis andre EU lande og lande uden for EU for de pågældende varenumre. Det blev ligeledes vurderet, hvor sandsynligt det er, at artiklerne dækket af de enkelte varenumre faktisk indeholder aktivstoffer. For mange varegrupper er der viden om, at der markedsføres biocidmidler til brug i disse artikler, men det vil formentlig kun være en lille del af artiklerne der faktisk indeholder aktivstoffer. Dette gælder eksempelvis aktivstoffer der indbygges i plast, for at beskytte overfladen mod vækst af mikroorganismer, og som i princippet kan bruges i mange typer af artikler. Artikler, som potentielt kan indeholde aktivstoffer og som i særlig grad importeres fra lande uden for EU, omfatter blandt andet artikler af plast, som indeholder aktivstoffer mod nedbrydning af stoffer i plasten og begroning af overfladen (bl.a. produkter af blød PVC hvor blødgøringsmidlet kan være nedbrydeligt), plastikprodukter med en bakte-

riehæmmende overflade (bl.a. hygiejniske overflader på diverse køkkenredskaber og hvidevarer), rengøringsartikler, kontorforsyning og forbrugerelektronik samt tekstiler med bakteriehæmmende materialer mod lugt.

Det har ikke været muligt at identificere kortlægninger af biocidaktivstoffer i artikler importeret fra lande uden for EU. Der er viden om, at det indiske marked for special-biocidmidler, som typisk indeholder de aktivstoffer, som vil optræde i importerede artikler (tekstiler, plastik, mm.), er domineret af store internationale producenter af biocidmidler, som udbyder de samme typer af biocidmidler, som anvendes i Europa eller Nordamerika. Rapporten indeholder en liste over aktivstoffer, som markedsføres fra disse aktører på de asiatiske markeder. Markedet for desinfektionsmidler i Indien er derimod i højere grad præget af lokale producenter. I relation til brug af uorganiske biocidmidler til træbeskyttelse og beskyttelse mod blåsplint er der mindre viden, og der kan meget vel være lokale producenter, der anvender biocidmidler, som ikke anvendes i EU i dag. De store internationale producenter operer også på det Sydøstasiatiske marked og i Kina, men i Kina er der en lang række mindre, lokale producenter af biocidmidler. Der findes i Kina en godkendelsesordning for biocidmidler og en database over godkendte biocidmidler, som kan søges via internettet, men det har inden for projektets rammer ikke været muligt at etablere et overblik over, hvilke midler der er godkendt, og i hvilken grad de godkendte midler svarer til de midler, der faktisk anvendes.

En liste med 119 biocidmidler, som markedsføres i Asien, er blevet dannet. Listen omfatter samlet 29 forskellige aktivstoffer, som alle er omfattet af vurderingsprogrammet i tilknytning til biociddirektivet. Sammenholdt med at der er registreret 123 aktivstoffer i biocidmidler i Produktregistret, må listen vurderes kun at udgøre en begrænset del af de aktivstoffer, som faktisk kan indgå i importerede artikler.

En nærmere analyse af, hvilke aktivstoffer der vil kunne optræde i importerede artikler, vil enten indebære omfattende laboratorieanalyser af importerede artikler eller en mere indgående kortlægning af markedet for biocidmidler i de lande, som der importeres fra. Sidstnævnte vil også skulle omfatte søgninger på lokalsproget og inddragelse af konsulenter med lokalkendskab.



# 1. Biocidal products marketed in Denmark

## 1.1 Data sources

### 1.1.1 The Danish Product Registry

A search was made for biocidal products on the Danish market registered in the Danish Product Registry's (PR) database PROBAS. The search was conducted for all active substances currently allowed under the Biocidal Product Directive (BPD). This was interpreted as active substances listed in Annex II to Commission Regulation 1451/2007 on evaluation of existing active substances and listed in Annex I and IA to the BPD, but excluding those active substances in the non-inclusion list of the BPD, which were evaluated and rejected for inclusion in Annexes I and Ia of the BPD for all product types (PTs) to be evaluated for the particular active substance (according to Annex II of Commission Regulation 1451/2007). This means that substances currently evaluated and rejected for only some of the product types planned, were included in the Product Registry search conducted. The Product Registry search included 274 active substances from the lists.

Of the list of active substances to be evaluated<sup>1</sup>, only 85 substances were evaluated and rejected for all planned product types, according to a cross check with the consolidated non-inclusion list available at the Joint Research Centre's web-site (EC JRC, 2012). As mentioned, these 85 substances were excluded from the Product Registry search.

In Denmark, producers and importers are obliged - since 2003 - to submit information to the Product Registry for all biocidal products for private as well as professional use (Arbejdstilsynet, 2012; Statutory order 558 of 19/6 2003; Statutory order 702 of 26/06 2011). For other mixtures with active substance contents (e.g. paints with in-can preservatives), producers and importers are only obliged to notify mixtures for professional use, which contain at least one substance classified as dangerous in a concentration of at least 0.1% or 1% (depending on the classification of the substance). For notified products, all constituents contained should however be notified. Producers and importers should update their records in the Product Registry continuously as changes occur. Experience has shown, however, that often, the records are not updated when registered products are not marketed any more or updated information on constituents is not notified when the products are reformulated. Additionally some companies (probably mostly new, small importers) are not aware of their obligation to register their products. A search in the Registry should therefore likely be considered indicative and informative, yet not a complete overview of all relevant products, unless the data have been updated by the Product Registry with recent contact to all relevant companies (not done for this study). For this reason, additional information on marketed biocidal products was collected via questionnaires in this study, as described in the following section.

### 1.1.2 Company surveys

A questionnaire on the usage of biocidal products in Denmark was sent through the following trade organisations to their members:

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<sup>1</sup> According to MS Word draft version of Annex II submitted to DEPA for the project by the European Commission, October 2012. A detailed check of the draft vs. the published Regulation was not conducted, but only a few deviations were observed (and corrected).

- SPT (The Association of Danish Cosmetics, Toiletries, Soap and Detergent Industries): sent to all members;
- DFL (Danish Coatings and Adhesives Association): sent to all members;
- Procesindustrien (the Process Industry): sent to members judged by the organisation to be relevant;
- Kemi og Life Science (Chemistry and Life Science): sent to members judged by the organisation to be relevant;
- Fugebranchen, FSO (the Sealants Industry): sent to members judged by the organisation to be relevant.

The same questionnaire was sent to the following purchasing networks/organisations of the Danish pharmacies: Apotekernes A.m.b.a, A-apoteket and Apotekeren who has answered that the networks/organisations are not involved in the distribution of biocidal products.

Furthermore, a major distributor of biocidal products forwarded the questionnaire to their customers.

The questionnaire is shown in Annex 6.

In total, the questionnaire was sent to around 200 companies. Answers were obtained from 35 companies (~7%), who reported in total 456 biocidal products (of these 444 with active substances included in Annex II to Commission Regulation 1451/2007 or Annex I and IA to the BPD), which may be compared with the 931 biocidal products registered in the Product Registry. It should be noted that many of the companies who received the questionnaire are manufacturers or distributors of biocide-treated articles rather than manufacturers or importers of biocidal products.

## **1.2 Authorised biocidal products**

Authorised biocidal products in Denmark are administrated by the Danish EPA and the Danish Veterinary and Food Administration (DVFA). The lists of authorised biocidal products are updated regularly.

The Danish EPA has historically administrated certain biocidal products together with plant protection products. In a transitional period until the EU has evaluated all active substances, some biocidal products, that are covered by the existing Danish authorisation scheme for biocidal products, must still be authorised in accordance with these rules. This scheme will continue to apply to individual products until a decision has been made in the EU about inclusion or non-inclusion of the active substance(s). The products must then be authorised pursuant to the new rules.

The published list is available at DEPA's home page at:

[http://www.mst.dk/English/Biocides/Authorized\\_biocidal\\_products/](http://www.mst.dk/English/Biocides/Authorized_biocidal_products/). The Danish authorisation system concerns biocidal products within the following product-types/applications:

- Fungi that attack wood (part of PT8);
- Harmful organisms in timber and woodwork (part of PT8);
- Algae (part of PT2 and part of PT10);
- Slime-forming organisms in pulp (part of PT12);
- Vermin that infest pets; harmful organisms in textiles, insects, snails and mites (PT16, PT18);
- Water voles, moles, mice and rats (PT14, part of PT 23);
- Certain repellents, for instance mosquito repellents (part of PT19).

In total 370 biocidal products are approved by the Danish EPA with a total of 35 active substances.

DVFA is administering the approval scheme for disinfectants for food and feed area in agriculture and for the food-processing industry (part of PT4) as well as veterinary products for teat dips and udder cleaning. The veterinary products for teat dips are considered biocidal products under PT3, whereas the products for udder cleaning are not considered biocidal products. The lists are available at DVFA's website at:

[http://www.foedevarestyrelsen.dk/Foedevareer/Kemiske\\_forureninger/Desinfektionsmidler/Godkendte\\_produkter/Sider/godkendte\\_produkter.aspx](http://www.foedevarestyrelsen.dk/Foedevareer/Kemiske_forureninger/Desinfektionsmidler/Godkendte_produkter/Sider/godkendte_produkter.aspx).

In total, 220 products for teat dips (PT3) and 476 disinfectants (PT4) are approved by DVFA.

### **1.3 Results**

#### **1.3.1 Biocidal products approved by DEPA and/or registered in the Product Registry**

A total of 175 companies had registered biocidal products categorised as such in the Product Registry. The product codes for the biocidal products are listed in Annex 2.

Of these 175 companies, 51 companies had registered 4 or more biocidal products, 15 companies had registered 10 or more products and 5 of these companies had registered 30 or more products.

The 51 companies with 4 or more registered biocidal products have in total registered about 730 biocidal products or approximately 79% of the total number of registered biocidal products. Most of these companies were distributors of chemicals, in the soaps and detergents business or in paints, including antifouling paints. This also implies that while these few companies account for the majority of registrations of biocidal products, many (124) companies each had only one or a few biocidal products registered in the Product Registry.

In total 123 biocidal active substances were registered in the 931 biocidal products registered in the Product Registry. In some cases the substances may in fact not serve as active substances in the biocidal products, but the term "active substances" is still used in this context. Of the 123 active substances, 53 substances were registered for 4 or more biocidal products and registered by 3 or more registrants. Annex 1 includes a list of active substances for which information on the registration in biocidal products is non-confidential.

For the remaining active substances (beyond the 53 mentioned above) it is considered confidential whether they are registered in biocidal products in the Product Registry. In all the mixtures (including both biocidal products and other mixtures) registered in the Product Registry in total 167 active substances were registered.

The active substances registered for 30 or more biocidal products are listed in Table 1 with an indication of the number of registered biocidal products and the total number of all mixtures in the Registry. For several of the active substances, the number of all mixtures in which they are used, is more than twenty times the number of biocidal products they are used in. This may partly be due to a large number of biocide-containing mixtures (e.g. paints with in-can or film preservatives), partly it reflects that perhaps the main purpose of many of the active substances is not always to be active substances in the mixtures.

Table 1 also includes background knowledge on other uses of the active substances. For those substances with no indication of other uses given, it is considered that they are predominantly used as biocidal active substances. Furthermore, the table shows whether the substances have been indicated in the questionnaire responses as active substances.

**TABLE 1**  
**BIOCIDAL ACTIVE SUBSTANCES REGISTERED IN 30 OR MORE BIOCIDAL PRODUCTS IN THE DANISH PRODUCT**  
**REGISTRY**

Substance	CAS No	Number of biocidal products	Number of mixtures of all types	Substance indicated in questionnaire as active substance	Examples of other uses of substance
<b>Formaldehyde</b>	50-00-0	30	1,084	-	Precursor to many chemicals and polymers (e.g. urea formaldehyde and melamine glues used in wood and isolation media)
<b>Ethanol</b>	64-17-5	132	1,712	X	Fuel and fuel additive, alcoholic beverages, precursor for other chemicals, solvent for various purposes
<b>Propan-2-ol</b>	67-63-0	143	2,018	X	Solvent, precursor to other chemicals, personal care products
<b>Citric acid</b>	77-92-9	41	458	-	Food and beverages ingredient, pH regulator for various purposes
<b>Peroxyacetic acid</b>	79-21-0	45	54	X	Precursor to other chemicals and to polymers
<b>Pentandial</b>	111-30-8	39	108	X	
<b>Tolyfluanid</b>	731-27-1	33	84	X	
<b>Copper(II)oxide</b>	1317-38-0	90	117	-	Pigment, batteries
<b>Copper(I)oxide</b>	1317-39-1	122	182	X	Pigment
<b>Didecyldimethylammoniumchloride</b>	7173-51-5	66	109	X	
<b>Copper</b>	7440-50-8	87	235	-	Construction material, art (etching) material
<b>Siliciumdioxide (unspec.)</b>	7631-86-9	94	2,242	-	Glass, ceramics, cement, filler in polymers
<b>Sodiumhypochlorite</b>	7681-52-9	51	189	X	Bleaching agent, cleaning agents
<b>Hydrogenperoxide</b>	7722-84-1	85	187	X	Bleaching agent, cleaning agents
<b>Copper(II)sulfate (1:1)</b>	7758-98-7	45	77	-	
<b>Chlorhexidinguconat</b>	18472-51-0	30	42	X	
<b>Quaternary ammonium compounds, benzyl-c12-16-alkyldimethylchlorides</b>	68424-85-1	59	105	-	

The biocidal product types (PTs) represented in the Product Registry or approved by DEPA are listed in Table 2, along with the number of biocidal products in each product type and examples of sectors for which the products are intended (as registered in the registry). As shown, the product types with most biocidal products were PT2 (private area and public health area disinfectants and other biocidal products), PT18 (insecticides, acaricides and products to control other arthropods), PT21 (antifouling products), with PT3, PT4 and PT1 as runner-ups.

**TABLE 2**  
BIOCIDAL PRODUCT TYPES (PT) REPRESENTED IN THE DANISH PRODUCT REGISTRY OR APPROVED BY DEPA

Product category name (PT)	Product application code	No. of biocidal products	No. of active substances *1	Examples of major use sectors according to the Product Registry search performed
<b>Human hygiene biocidal products (PT1)</b>	B15110	50	22	Many, including production of foods and beverages, restaurants, education and kindergartens, hotels, health sector.
<b>Private area and public health area disinfectants and other biocidal products (PT2)</b>	B15120	424	84	Many, including health sector, private homes, cleaning services, production of foods and beverages, hotels, restaurants, agriculture, production of cleaning agents and pharmaceuticals.
<b>Sanitary products for toilets*1 (PT2)</b>	B15142	20	12	Cleaning services, hotels, restaurants.
<b>Veterinary hygiene biocidal products (PT3)</b>	B15130	64	37	Production of livestock, dairies, veterinary.
<b>Food and feed area disinfectants (PT4)</b>	B15140	78	35	Livestock production, agriculture, production and retail of foods and beverages, restaurants, hotels, health care.
<b>Drinking water disinfectants (PT5)</b>	B15150	8	5	Water utilities.
<b>In-can preservatives (PT6)</b>	B15310	25	19	Production of paints, personal care products, glues.
<b>Film preservatives (PT7)</b>	B15320	5	9	Production of paints and furniture.
<b>Wood preservatives (PT8)</b>	B15315	152	30	Painting services, private homes, paint production, carpentry.
<b>Fibre, leather, rubber and polymerised materials preservatives (PT9)</b>	B15330	1	1	Confidential.
<b>Masonry preservatives (PT10)</b>	B15340	9	7	Construction.
<b>Preservatives for liquid-cooling and processing systems (PT11)</b>	B15350	31	18	Production of food and beverages, production of polymers, glass, pharmaceuticals, waste water treatment.
<b>Slimicides (PT12)</b>	B15360	10	16	Shipyards and boat production, private homes.
<b>Metalworking-fluid preservatives (PT13)</b>	B15370	4	5	Metal industry
<b>Rodenticides (PT14)</b>	B15510	78	10	Confidential. *3
<b>Avicides (PT15)</b>	-	0	0	-
<b>Molluscicides (PT16)</b>	-	0	0	-
<b>Piscicides (PT17)</b>	-	0	0	-

Product category name (PT)	Product application code	No. of biocidal products	No. of active substances *1	Examples of major use sectors according to the Product Registry search performed
<b>Insecticides, acaricides and products to control other arthropods (PT18)</b>	B15550	157	22	Private homes
<b>Repellents and attractants (PT19)</b>	B15560	19	4	Confidential.
<b>Preservatives for food or feedstocks (PT20)</b>	B15710	10	8	Production of animal feed, dairy products, etc.
<b>Antifouling products (PT21)</b>	B15720	156	27	Production and repair of ships and boats, aquaculture, marinas, etc.
<b>Embalming and taxidermist fluids (PT22)</b>	-	0	0	-
<b>Control of other vertebrates (PT23)</b>	-	0	0	- *2

Notes:

- \*1 Substances on the list of active substances, some of the substances may not be the active substances in all products, but may have other function.
- \*2 Biocidal products used for control of moles are registered together with the rodenticides.
- \*3 The data are confidential because less than 3 notifiers to the Product Registry have reported this information.

### 1.3.2 Comparison of the result of the questionnaire survey and the Product Registry search

In total 931 Biocidal product are registered in the Product Registry, as mentioned above, while the questionnaire survey identified 444 biocidal product with 71 active substances included in the review programme (Annex II of Commission regulation 1451/2007). The questionnaire survey identified 4 active substances which were not included in the Product Registry or approved by the Danish EPA. It has not been possible to examine if any of the four active substances are present in biocidal products approved by the DVFA, since it has not been possible to obtain CAS numbers of biocidal product approved by the DVFA.

**TABLE 3**  
TOTAL NUMBER OF BIOCIDAL PRODUCT, ACTIVE SUBSTANCE AND INFORMANT/RESPONDENTS

	Total biocidal products	Total active substances	Number of notifiers/ respondents
Product Registry search	931	123	175
DEPA approved biocidal products	370	35	77
Total Product Registry and DEPA approved	1,280	147	242
Questionnaire survey (brackets: including substances not included in Annex II of Commission regulation 1451/2007 or Annex I or IA to the Biocide Directive.)	444 (456)	71 (84)	33 (33)
Grand total *1	1,644	151	259
Included in the questionnaire survey, but not in Product Registry or approved by DEPA.	305 *1	4	17 *1

\*1 Differences in spelling have not been taking into consideration and the actual number of different biocidal product and notifiers/respondents is less.

The total number of active substances, biocidal products and companies per product type in the two surveys are shown in Table 4. The difference between "Total" and "PR+EPA approved" gives the number of active substance, biocidal product and companies, respectively, identified through the questionnaire survey that are not registered as biocidal products in the Product Registry or approved by DEPA.

As shown in Table 4 below, for some product types the questionnaire survey has identified up to 10 active substances (PT7) which are not registered in the Product Registry or approved by the DEPA. Overall, only 4 additional active substances were identified, however.

The questionnaire survey identified 13 active substances which are not included in the review programme or included in Annex I and IA to the Biocidal Product Directive. It must be assumed that the substances actually act as active substances in the biocidal products, since the companies specifically states the substances as active substance.

It should be emphasised that the number of additional biocidal products most probably is overestimated, since the same products could be spelled differently in the questionnaire survey and the in the PR/DEPA approvals. On the other hand, the number of additional active substances reflects the actual additional number and the same applies in general to the number of companies.

A clear difference across the product types regarding the number of active substances is seen. For the majority of the product types is it a small number that are added by the questionnaire survey. For PT6 and PT7, however, the number of additional active substance is significant. The explanation is likely that the substances in the Product Registry are registered by their end-use only, for instance in paint, while individual paint manufacturers who imports the biocidal product themselves indicated the active substance under the proper product types in the questionnaire survey.

It is clearly seen that quite a few companies have not notified their biocidal products to the Product Registry. While it should be expected that most of the companies, who has answered the questionnaire are companies who actually have a high level of chemical management in the company, the results indicate that it is likely that a substantial number of companies has neither answered the questionnaire nor notified to the Product Registry.



**TABLE 4**  
TOTAL NUMBER OF BIOCIDAL PRODUCTS, ACTIVE SUBSTANCES AND NOTIFIERS/RESPONDENTS PER PRODUCT TYPE

	Total active substances			Total biocidal products			Total notifiers/respondents		
	QS	PR + DEPA appr.	Total	QS	PR + DEPA appr.	Total	QS	PR + DEPA appr.	Total
<b>PT1</b>	12	22	24	59	50	102	10	18	25
<b>PT2</b>	28	84	89	107	424	506	18	115	129
<b>Toiletart. (PT2)</b>	0	12	12	0	20	20	0	13	13
<b>PT3</b>	20	37	42	89	64	135	6	13	17
<b>PT4</b>	21	35	39	92	78	154	8	19	25
<b>PT5</b>	8	5	11	7	8	15	4	3	5
<b>PT6</b>	16	19	28	57	25	78	7	8	12
<b>PT7</b>	17	9	19	56	5	60	9	5	12
<b>PT8</b>	12	30	31	37	152	187	6	50	53
<b>PT9</b>	0	1	1	0	1	1	0	1	1
<b>PT10</b>	0	7	7	0	9	0	0	5	5
<b>PT11</b>	10	18	23	8	31	39	5	10	13
<b>PT12</b>	3	16	19	3	10	12	1	6	6
<b>PT13</b>	4	5	8	4	4	8	1	3	3
<b>PT14</b>	5	10	10	10	78	84	2	16	17
<b>PT15</b>	0	0	0	0	0	0	0	0	0
<b>PT16</b>	0	0	0	0	0	0	0	0	0
<b>PT17</b>	0	0	0	0	0	0	0	0	0
<b>PT18</b>	4	22	24	3	157	160	2	36	37
<b>PT19</b>	0	4	4	0	19	19	0	9	9
<b>PT20</b>	0	8	8	0	10	10	0	2	2
<b>PT21</b>	8	27	27	54	156	210	1	9	9
<b>PT22</b>	3	0	3	3	0	3	1	0	1
<b>PT23 *1</b>	0	0	0	0	0	0	0	0	0

\*1 Biocidal products for mole control (belong under PT23, since they are not rodents) have traditionally been approved together with the rodenticides (PT14).

QS: Questionnaire survey.

### 1.3.3 Characterisation of the supply chains of biocidal product in Denmark

To characterize the market of biocidal product you may distinguish between the following parts of the supply chain:

- Production of biocidal active substances;
- Import of active substances and import of biocidal products;
- Distribution of active substances;
- Formulation (production, formulation) of biocidal products;
- Distribution of biocidal products (wholesale, commercial market);
- Distribution of biocidal products (retail market).

In many cases the same company will be in charge of several parts of the supply chain, for instance some of the large manufacturers of paint for commercial use import the active substance, formulate the biocidal products and distribute the products to the professional users. However, in most cases several companies are involved in the supply chain.

### **Production of the active substance**

In general, the active substance are produced by large international chemical companies and imported to Denmark. Identified exceptions are certain acids used in disinfectants, a few agents for pest control and some repellents.

### **The chemical distributors**

A very large part of the active substances are imported and distributed by a number of chemicals distributors. These companies have typically a broad product portfolio of chemical substances for the industry. According to the available information around 10-20 of these companies are responsible for the main part of the distribution of the active substances.

The companies can be local departments of large international chemical manufacturers or distributors such as Brenntag, BASF or Ashland, or they can be smaller Danish companies who are representatives of a number of different chemical manufacturers. The individual chemical distributor is typically representative of one of the large international manufacturers of biocidal products, for instance: Lonza, Troy or Schülke & Mayr GmbH. Some of the companies are (as concerns biocidal products) primarily distributing disinfectants (PT1-4), while others focus on preservatives.

The chemical distributors to some extent also import and distribute the finished biocidal products. A few of the chemical distributors also have a production of biocidal product in Denmark (both own labels and private labels for other companies).

### **Disinfectants – PT1, PT2, PT3, PT4**

The Association of Danish Cosmetics, Toiletries, Soap and Detergent Industries (SPT) estimates that 15-20 of the organization's members provide disinfectants. However, the total number of companies who has notified these PTs to the Product Registry or answered the questionnaire is 133, which shows that there are a large number of players in the market. Many of the companies have only registered a few biocidal products and distribution of disinfectants is only a small part of their activities.

For PT1 and PT2 there is a significant difference between the commercial market and the retail market and different players are operating in the two markets, which also is described in the survey of biocides used in Denmark from 2000 (Lassen et al., 2001). In general, it is the same players who are in the market today (maybe using slightly changed names) as it was 13 years ago.

The commercial market is far larger than the retail market. The companies typically import the active substance themselves or through the chemical distributors, and formulate biocidal products for the commercial market. The products are typically sold directly to the end-users, who for instance could be larger food manufacturers. The companies who operates in the commercial market

does in general not operate in the retail market, since this market differs as regards the supply chain, packaging, labelling, instructions, etc.

The retail market of soap and cleaning agents (where relatively small amounts of disinfectants are sold) is characterized by a few large international companies. According to the information from the industry, furthermore 8-10 formulators manufacture private label disinfectants, for example for the large supermarket chains.

There is a special market for PT1 as regards skin disinfection, where two companies are dominating. The market actors are otherwise primarily companies who sell skin care and cleaning agents over a broad range of uses.

According to the obtained information, about 40-100 so-called "small formulators" with 1-20 employees exist. They typically formulate agents with benzalkonium chloride or hypochlorite for house cleaning (PT2, 10), but they also produce disinfectants, for instance for the agricultural sector (PT2 and PT4).

A number of the companies who provides biocidal product for veterinary hygiene (PT3) are suppliers of a broad range of products for the agricultural sector. In addition to these, the large suppliers of disinfectants for the commercial market are also supplying biocidal product for veterinary hygiene. The number of companies with biocidal products for teat dip and teat spray approved by the Danish Veterinary and Food Administration is somewhat larger than the number of companies registered in the Product Registry. Many of the companies with approved biocidal products are foreign companies.

Companies who have registered biocidal products under PT4 are typically the same companies who supplies disinfectants under PT2 for the commercial market and a few companies who specialize in supplying products for the agricultural sector (same as the suppliers of biocidal product under PT3).

There is a special market for biocidal product for swimming pools, where some of the players are the major pool suppliers. Beside these, the leading suppliers to the area seem to be the same companies who provide disinfectants for the professional market.

#### **Disinfectants for drinking water - PT5**

There are only a few companies who have registered biocidal product for disinfection of drinking water. Besides the general suppliers of disinfectants, one company is specialized in this area.

#### **Preservatives - PT6, PT7, PT9**

Preservatives in PT6, PT7 and PT9 are used for the production of treated articles and the users are typically manufacturers of these articles.

In-can preservatives (PT6) and film preservatives (PT7) are primarily imported and distributed to manufacturing companies by a number of chemical distributors. These distribute especially PT6 for the manufacturers of paint, glue, joint filler and different products used in the construction industry (such as concrete additives) and for cleaning agents. Besides the large manufacturers of paint there are a number of small producers of speciality paints.

Industry categories for PT6 registered in the Product Registry are:

- Manufacture of paint, varnish and similar surface treatment products, printing inks and sealants;
- Manufacture of glues;
- Manufacture of perfume, hair shampoo, toothpaste etc.,

- Manufacture of beauty and skin care products;
- Manufacture of soap, cleaning agents and polishing agents.

However, some of the above uses may be covered by the legislation on cosmetic products.

Industry categories for PT7 in the Product Registry are primarily manufacture of paint and varnish, but can also for instance be manufacture of plastic products. It also includes products that are indicated as used for "surface treatment of metal" or "manufacture of other furniture".

A number of the large manufacturers of paint and glue import biocidal product, themselves. The treated articles (paint, joint filler, glue, cleaning agents, etc.) are either delivered directly from the manufacturers to the industrial end-user or they are distributed via DIY retailers, super markets, paint shops, etc. to private and professional users. At this stage the products are no longer biocidal product, but treated articles.

Only one company has notified fibre, leather, rubber and polymerised materials preservatives (PT9) to the Product Registry.

### **Wood preservatives - PT8**

The main part of the 25 companies with wood preservatives are either manufacturers or importers of the finished wood preservatives.

The active substances for the production of wood preservatives in Denmark are either imported directly by the manufacturers of the wood preservatives or imported by chemical distributors. Among the biocidal products registered in the Product Registry are a few active substance blends from the chemical distributors, who distribute the active substances to the manufacturers of wood preservatives.

Wood preservatives are either delivered directly from the manufacturers/importers to industrial end-users or are distributed via DIY retailers, paint shops, etc., to private and professional users.

### **Masonry preservatives - PT10**

Masonry preservatives (PT10) cover both agents for control of algae and mould on brickwork and woodwork and agents for a more general protection of building materials. The agents for control of algae are, however, considered primarily to be covered by PT2. There are only five companies registered in this category in the Product Registry. Only one company markets a product which is approved for control of algae.

The predominant biocidal product used for cleaning of brickwork is benzalkonium chloride (e.g. under the trade name Rodalon®). A few products containing benzalkonium chloride for cleaning of houses are also listed under PT2 in the Product Registry, but there are a far greater number of products on the market.

In the survey of biocides from 2000 it is described how the consumption of algaecides suddenly dropped, when the sale of algaecides containing benzalkonium chloride was prohibited, but afterwards the same products were marketed as "house cleaning agents". This still seems to be the case and the market is characterized by many different products and many players in the market. DEPA has recently contacted around 250 roof cleaning companies to specify the requirements.

The few biocidal products, which are registered in the Product Registry under this product type (PT10), are primarily marketed as anti-mould agents.

### **Preservatives for liquid-cooling and processing systems - PT11**

A large number of suppliers of preservatives for liquid-cooling and processing systems (PT11) exist. Eleven companies are registered in the Product Registry, and in the questionnaire survey additional five companies have indicated they import or manufacture products under PT11. The preservatives are imported by two different groups of players:

- Suppliers of water treatment systems;
- Chemical distributors or suppliers of disinfectants.

In the survey of biocides from 2000 (Lassen et al., 2001) three companies were indicated as the major suppliers; two of these are still among the important suppliers.

These biocidal products have a large number of users: Industrial companies (among others manufacturers of food, beverage, plastic products, synthetic fibre, industrial gases, windmills and metal processing), power plants, district heating plants, district heating distribution companies and hospitals (cooling systems). The last-mentioned use area is not indicated in the Product Registry, but mentioned in the survey from 2000 (Lassen et al., 2001).

### **Slimicides - PT12**

Five companies have notified 14 products to the Product Registry under PT12 and furthermore one company has been identified through the questionnaire survey. According to the survey of biocides from 2000, slimicides were primarily used in connection with oil and gas extraction. A very small part was used for protection against slime formation in fuel tanks. However, it is not these industry categories which are registered in the Product Registry.

It seems that the mixtures which are registered should rather be notified under other product types: Antifouling products (PT21) and preservatives for liquid-cooling and processing systems (PT11). A significant function of the biocidal products under PT11 or PT21 in fact is to control slime producing organisms, for instance in district heating systems, and the boundaries between the product types are not well defined. The authorisation scheme for biocidal products does only concern slimicides against the formation of slime in pulp.

### **Preservatives for metal treatment fluids - PT13**

Three companies have reported preservatives for metal treatment fluids to the Product Registry. One of these, a chemical supplier, has also answered the questionnaire. Companies who imports biocidal product under PT13 are typically chemical suppliers or manufacturers of metal treatment fluids. It has not been examined to what extent biocidal products are sold to the manufacturers of metal treatment fluids or are sold directly to the end-users, who formulate the fluids themselves. The industry categories mentioned in the Product Registry for PT13 are: "production of other chemical compounds" (must be assumed to be the production of metal treatment fluids), "mechanical processing", "production of windmills and associated parts", "production of hydraulic equipment" and "production of other pumps and compressors". The four last-mentioned indicate that the biocidal products to some extent are used by end-users of metal treatment fluids, who formulates the fluids themselves.

### **Rodenticides - PT14**

Eleven companies have registered biocidal products against rodents, water vole and moles within the authorisation scheme. Of these, two has registered PT14 in the Product Registry and additional two have answered the questionnaire with biocidal product within PT14. There are different groups of players:

- Danish companies which are both manufacturers and distributors of biocidal products, both own products and private labels products for the private market;

- Companies acting on the professional market for pest control;
- Representatives of foreign chemical companies.

#### **Avicides, molluscicides and piscicides - PT15, PT16, PT17**

The Product Registry does not contain specific information on avicides, molluscicides and piscicides. It has not been possible to identify any biocidal products for control of these animals on the Danish market.

Iron(II)phosphate (CAS no. 13463-10-0) is widely sold for the control of slugs, typically under the trade name Ferramol, and it is covered by DEPA's authorisation scheme for plant protection products.

#### **Insecticides - PT18**

Fifteen companies have approved biocidal products within the group of "insecticides against flies, moth, ants, grain pest, etc.", five have approved "products against pests on farm animals and pets" and three have approved "combined fungicides and insecticides".

The market is characterized by many types of players and the supply chains have not been examined in details. The main groups of players are:

- Representatives of international manufacturers of plant protection products and biocidal products;
- Representatives of international manufacturers or distributors of biocidal products for personal care;
- Suppliers of products for agriculture and veterinary products;
- Companies specialized in pest control;
- Distributors with a wide range of products.

#### **Repellents and attractants – PT19**

According to the list of approved biocidal products, eight companies have approved repellents against mosquitoes. The groups of players are:

- Manufacturers and suppliers of plant protection products in general;
- Specialists in repellents;
- Suppliers of agents for personal care;
- Distributors with a broad range of products.

Repellents used against wildlife to avoid damage to crops are authorised as plant protection products. Some of the same products are also marketed as agents to avoid wildlife on roads and may be considered a biocidal product for this application.

A number of repellents against dogs and cats are sold. These products are typically sold in pet shops and pet equipment shops, DIY retailers and in webshops. Repellents against dogs and cats are among others marketed by the following groups of market players:

- Gross dealers of products for pet shops and pet equipment shops;
- Manufacturers and suppliers of chemical products for households.

There seems to be quite few repellents against other animals on the market. The importers are either broad suppliers of chemical products or companies specialised in plant protection products and biocidal products. The following types of agents are sold:

- Repellents against water vole and moles (not to be confused with the agents to control these animals). The agents are typically sold in DIY retailers, paint stores, webshops and similar places.
- Repellents against marten, bats and foxes. The agents are typically sold in DIY retailers, paint stores, webshops and similar places.
- Repellents against domestic animals, among others marketed for prevention of cannibalism in pigs and poultry.

Traps with attractants to fruit flies, wasps and moth are sold. It has not been examined whether the used agents are foodstuff and thereby exempted.

The supply chains for repellents and attractants have not been examined closer.

### **Preservatives for food and feed - PT20**

Are not included in this study, since preservatives for food are not included in the Biocide Regulation.

### **Antifouling products – PT21**

The players in the market for antifouling products are:

- A Danish manufacturer of marine paint;
- Representatives of foreign manufacturers of marine paint;
- Distributors of products for aquaculture and commercial fishing
- Suppliers of water treatment systems.
- Boat equipment distributors, chemical distributors and distributors of paint.

The supply chains have not been examined in detail.

### **Embalming and preservation fluids - PT22**

According to the survey of biocides from 2000 ethanol was by far the most used active substance and it was supplied by a large number of suppliers of biocidal products. Ethanol though is not included in the review programme for use under PT22 and consequently it is no longer used for this application. The supply chains have not been examined.

### **Agents against other vertebrates - PT23**

To the knowledge of the authors other controlled vertebrates in Denmark includes moles only. The biocidal products against moles are the same as used against water vole and the products are authorised as rodenticides (PT14).

# 2. Treated articles

## 2.1 Identification of article types

Relevant types of treated articles were identified through selected key literature on the issue, including:

- A study for the European Commission on impacts of possible measures to manage articles or materials treated with biocides – in particular when imported (Milieu and DCT, 2006);
- A recent Swedish study on biocide-treated articles (KemI, 2012);
- A survey of biocides used in Denmark (Lassen et al., 2001);
- The European Commission interpretation decision diagram for treated articles (EC, 2012b), and Annex V of the Biocidal Products Directive;
- Websites of major global manufacturers of biocidal products such as Arch/Lonza, Thor, Clariant, Troy, DOW.

The information is supplemented with the authors' background knowledge.

The identified types of treated articles are listed in Annex 3. Note that this identification does not mean that all articles of the mentioned type have active substances contents. Rather, many of the articles should be seen as possibly containing active substances in some cases.

The definition of biocide treated articles used in this study follows the interpretation proposed by the European Commission for the BPR (EC, 2012b). For this study, a limitation of the concept "treated articles" is however used for articles for which the treatment plays an active role in the article's protection. For example, a water based paint containing an in-can preservative for prolonging of shelf life is a treated article, while an indoor table painted with the same paint is here not considered a treated article. A garden table painted with paint with wood or film preservatives would on the other hand be considered a treated article, because the active substance still has an active function in the finished product.

This limitation (painted indoor table example) was taken for practical reasons in the focus of this study. It is acknowledged, however, that any active substance present in an article - even after it does not anymore have an active function - may result in exposure to humans and the environment, for example in case the active substance evaporates from the product, i.e. from the painted table in the example.

As another example, antifouling paints containing active substances would, according to the Commission's interpretation (EC, 2012b), not be considered a treated article, but rather a biocidal product, because it in itself has a biocidal function, i.e. preventing microbes and higher forms of plant and animal species from attaching themselves on the painted surface; it would thus not be sold, if it did not contain the active substance (except in the case of mechanically functioning silicone anti-fouling paints or similar types not containing active biocidal substances).

Following the Commission's interpretation (EC, 2012b), ships, structures/products (for use in water) supplied with a coating of antifouling paints/products (containing active substances) could perhaps be regarded as treated articles. These have however not been included in the trade analysis described below.



For some of the article groups, such as waterbased paints or impregnated wood, the articles are considered always to contain biocidal active substances, but for other article groups, only subgroups or a few specific articles include active substances. KemI (2012) demonstrates that biocidal active substances can be incorporated into consumer articles made of all kinds of materials, including textiles, polymers, ceramics and paper. No data have been available to indicate the fraction of each article group which contain biocidal active substances.

According to a Rapra Review Report on biocides in plastics (Nichols, 2004) many plastic types may contain a biocidal active substance although even in the same type of article the manufacturer may decide to add or omit an active substance depending on the quality required in the final article. Application of active substance in plastics was in 2004 not a major application area of biocides and for that year it was reported that globally 2,500 tonnes of biocides (not indicated whether it is tonnage biocidal products or active substances) were used for plastics (Nichols, 2004). However, it seems to be a growing application area, but newer data have not been identified. In 2005, the most important single antimicrobial application in plastics was PVC flooring which uses more than a third of all the active substances incorporated in plastics products. The second most important application was the protection of hygienic surfaces such as worktops (Rapra 2005 as cited by Pritchard, 2005).

In plastics, the active substances are used to prevent degradation of the plastics itself (e.g. degradation of plasticisers used in the plastics) or to impart external anti-microbial or hygienic effect. Microorganisms grow by adopting some of the raw materials within the plastics (e.g. plasticisers) or e.g. foodstuff absorbed on the surface and when the microorganisms grow it may affect the plastics' mechanical properties or the microorganisms may colonise the surface of the plastic making it unsightly, create odours, trap water or create unhygienic conditions (Nichols, 2004)

According to Nichols (2004) examples of applications where biocidal active substance are used in plastics include:

- PVC- Tarpaulins, truck canopies, pool and pond liners, silage pit liners, artificial leather, sheeting, awnings, textile coatings, flooring, wallpaper, roofing materials, garden furniture, refrigerator gaskets, automobile components;
- PU (polyurethane) – Shoe coverings, foams, textile coatings, shower curtains, electrical components.
- PE/PP (polyethylene/polypropylene) – Typically hygienic uses including textiles, pillows, quilts, carpets.
- Wood plastic composites (WPC) – anti rot, surface growth and anti-algal products for wood plastic composites.

Examples of biocidal products for plastics, are biocidal products in the VANQUISH™ 100 and OMADINE™ series from Lonza which are based on zinc pyrithione (ZPT, CAS No 13463-41-7) and n-butyl-1,2-benzisothiazolin-3-one (BBIT, CAS No 4299-07-4), respectively. According to the manufacturer, they are applied for the following plastic applications: Outdoor furniture covers, marine cushions, pond/pool liners, geotextiles, roofing membranes, PVC flooring, PU flexible and rigid foam, wire and cable, automotive plastic parts, and hygienic surfaces in Europe (hospitals, homes, pharmaceutical and cosmetic production facilities, public areas, etc...) (Specialchem, 2012).

Use of biocidal active substances for hygienic surfaces seems to be a growing area. Traditionally the application area has been surfaces in hospitals, pharmaceutical and cosmetic production facilities, but some agents are marketed for a wider range of articles of plastics or plastic parts.

Microban® uses a broad range of antimicrobial technologies that can be engineered into a breadth of materials including: polymers, textiles, coatings, paper and adhesives (KemI, 2012). The active substance is again zinc pyrithione (CAS No 13463-41-7) (Rogers Corporation, 2011). Examples of application areas are (KemI, 2012):

- Cleaning – Cleaning cloths, abrasive scourers, sponge scourers, cellulose sponges, cotton and synthetic mops, bath sponges, cleaning buckets;
- Household fixtures and appliances – Door levers, pull handles, grab bars, handrails, sanitary fittings, dishwashers, refrigerators, washing machines;
- Kitchen utensils – Cutting boards, plates, canisters, food containers, salad servers; Office, school and electronics – Scissors, rulers, protractors, erasers, stamps, computer keyboards, mice and mouse pads, coverings for iPods, Mp3 players and cell phones.

The same active substances is used in Sanitized® PL 21-60 used for PU foams and PVC.

Examples of silver-based biocidal products with broad applications spectra are Sanitized® Silver from sanitized A/G, Polygiene® from Polygiene AB and SteriTouch® from SteriTouch Limited (KemI, 2012). The biocidal products are applicable for textiles, plastic parts and laminates and compatible with most of the thermoplastic polymers such as PP, PE, PET, PS, POM, ABS, PC, PBT, SAN, EVA, TPE, and SBR. Indicated applications include: Clothing, underwear and lingerie, bike shorts, socks, gloves, footwear, ski boots, helmets, body armour, wet suits, uniforms, suit linings, shirts, shavers, toothbrushes, rubber sealings, handholds, grips, toilet seats, soap dispensers, drinking cups, silicone covers, worktops (KemI, 2012).

As an example, the silver-based biocidal products apply different technologies. The JMAC silver technology for hygienic surfaces from Clariant is based on the inorganic composite of silver chloride on titanium dioxide (Clariant, 2009). The active species are silver ions which interact with the microorganisms.

For this survey, information was searched on the possible use of biocidal products for hygienic surfaces in Asia for articles that may be exported to the EU. Limited information was obtained (more information on the use of biocidal products in general in Asia is provided in section 3.1). The Singapore based manufacturer of biocidal products, PCTS, which claim themselves of being one of the major manufacturers and suppliers of biocidal products and other chemicals to the coating and related industries in the Asia Pacific Region states regarding biocidal products for hygienic surfaces: *“Biocides are often used in functional coatings to create hygienic surfaces to meet the needs for antimicrobial protection under some special environmental, such as hospital, nursery and day care centres, school, retirement homes, and many residential and public places. PCTS has a full range of biocides to meet antiviral, antibacterial and antifungal needs for hygienic coatings”* (PCTS, 2012). The company lists biocidal products for a range of applications, but chemical names and CAS Numbers of active substances are not provided.

## **2.2 Extra EU import of treated articles**

Based on the identification of types of potentially treated articles, an analysis was made of the extra EU27+2<sup>2</sup> import of such articles. The aim of the analysis was to identify such articles which might constitute major imports of biocidal active substances, should a major fraction of the import actually be treated with active substances.

As mentioned in Section 2.1, the available evidence of the presence of active substances in the different types of articles is varying. For some article types, it is acknowledged that active substances are generally used, while for others, the evidence is sporadic, and in fact the major part of the mar-

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<sup>2</sup> Extra EU27+2 import is import from countries outside EU27 plus Norway and Switzerland, as the latter apply EU regulation on biocides.

keted articles may actually not be treated with biocidal products. We have indicated our understanding of the level of certainty as regards presence of active substances in the articles in Table 6 and Annex 3 with the following notation:

- 1: The articles are considered always to have active substance contents
- 2: Biocidal active substances may perhaps be present in a significant part of the products marketed, and
- 3: Biocidal active substances may be present, but probably in a small part of the products marketed.

The reason for focusing on extra EU27+2 imports is that treated articles manufactured within EU27+2 will already be subject to the BPD, and should thus only contain biocidal active substances already allowed under the BPD. This is not necessarily the case for import from third countries at present, but such import will be subject to article 58 on treated articles of the BPR entering into force in September 2013.

For each of the article types covered in the trade analysis, the import to Denmark from EU27+2 countries has also been quantified in order to assess the relative dominance of extra- versus intra EU27+2 import.

Besides the overall import trends, the specific import from selected countries and regions - Asia, China, India, USA, Canada - has been quantified separately in Annex 4. These are all expressed as percentage of the extra EU27+2 import (the percentage for China and India, respectively, are subsets of the percentage for Asia).

The detailed results of the trade analysis are shown in Annex 4 where the import from extra-EU27+2 is shown for all identified article types with potential biocidal active substance contents (except for a few for which the appropriate customs code could not be identified). Table 6 below however give an overview across the application groups in question. The grouping is inspired by KemI (2012) in combination with our additional findings. In the following, some main results are extracted from Table 6 and Annex 4. The specific commodity codes included in each commodity group are indicated in Annex 5.

As shown in Table 6, many of the article groups are dominated by imports from the EU27+2. For the following article groups however, a substantial fraction of the import for the group originates from outside EU27+2:

1. Plastic products with possible film (surface) preservatives (primarily plasticised PVC).
2. Articles that may come into contact with food.
3. Cleaning materials.
4. Office supplies and electronics.
5. Textiles.

Except for textiles, these groups (1-4 above) are dominated by articles with plastic surfaces, which may contain film preservatives (PT7). For many of these articles, the presence of biocidal active substances is relatively speculative based on the evidence provided in the references; meaning that active substances may be present in some of the articles imported, but that the fraction is unknown and likely minor, as depicted in the column "active substance presence indicator (import data)" in Table 6. Exceptions are plasticised PVC products, where a film preservative can be added to prevent decay of the plasticisers present, and refrigerators and freezers with anti-bacterial inner plastic panels (authors' observations), for which active substance presence may be significant, yet not generally verified.

As regards textiles, it is similarly the case that the fraction of articles in each category which may contain biocidal active substances is deemed small. Note that the "active substance presence indicator" pertains to the import custom codes, which means that for some article types, for example sportswear, a significant (but not major) part may contain biocidal active substances, whereas the relevant custom codes include other article types, which do most likely not contain active substances. Apparels, carpets and blankets of wool - especially in import from extra EU27+2 - may however contain active substances (moth proofing). Moth proofing of wool is according to Boutrup (2012) not used in the EU anymore, but may be used elsewhere, also in imported wool raw materials processed to final products in the EU. A significant part of all-weather apparel may be treated with biocidal products, but this clothing is not covered by specific commodity codes. Bedding may be impregnated with PT18 or 19 to prevent mites. According to the interpretation by the European Commission, a mosquito net treated with insecticides is a biocidal product.

The article groups shown in Table 5 are dominated by import from EU27+2, but extra EU27+2 imports constitute significant tonnages. The table describes the products relevance as regards biocidal active substances.

**TABLE 5**  
ARTICLE GROUPS DOMINATED BY IMPORT FROM EU27+2, BUT WHERE EXTRA EU27+2 IMPORTS CONSTITUTE SIGNIFICANT TONNAGES

Article group	Remarks
<b>Treated wood articles</b>	As mentioned in Table 4 below, this group includes impregnated construction wood (always with active substance content), windows/doors (generally impregnated when made of wood; perhaps also if made from plastic), and other wood products with varying active substance presence. The major part of the extra EU27+2 import in this group is however various wooden furniture, of which garden furniture likely generally contain active substances, but many others may not.
<b>Paints, sealants and glues</b>	This group is composed of articles which all include in-can and/or film preservatives (aqueous paints, glues and fillers) , actual biocidal products (wood preservatives), articles with potentially significant presence of active substances (paints, sealants for wet room and outdoor sealants with film preservatives) and article which may have sporadic active substance presence or no content of active substances (some articles under these custom numbers may be dry preparations with no need for biocidal agents). The import of individual article types can be seen in Annex 4.
<b>Detergents in aqueous solutions</b>	The custom numbers involved are mixed and likely include dry articles; whereas the group also include detergents/cleaning agents in aqueous solutions with in-can preservatives and actual biocidal cleaning products.
<b>Other building materials/applications</b>	As shown in Table 6, the group consists of polyurethane products and rubber for construction, some of which could perhaps contain film preservatives, and organic insulation materials (paper, wood fibre, flax, wool) which may generally contain active substances (aluminium salts and borates which at the same time act as flame retardants for some of them).
<b>Paper products with intentional addition of preservatives or film preservatives</b>	This group was included, because some of the references indicated that certain paper qualities contain fibre preservatives (PT9) for moist applications and coated paper with film preservatives. The custom numbers however also include many different types of coated or treated speciality paper in which active substance presence is uncertain or unlikely.
<b>Toilet/bathroom appliances and materials</b>	This is a diverse group. The Major imports from extra EU27+2 are various housing/toilet articles, toilet lids (a minor fraction perhaps with film preservatives), and toilet paper (of which a minor fraction could perhaps include PT9 active substances).

**TABLE 6**  
SUMMARY OF IMPORT OF ARTICLES THAT MAY CONTAIN BIOCIDAL ACTIVE SUBSTANCES

Article type	Article type import categories description*1	Active substance presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
		PT	indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>Treated wood articles</b>	Impregnated construction wood and windows/doors, other wood products with varying active substance presence	8	1,2,3	39,612	507,548	84%	65%	1%	1%
<b>Metalworking-fluids marketed with active substance contents for in-use preservation</b>	All lubricants, only few of them are for metal cutting and with active substances (water-containing)	13	1,2	161	11,719	42%	8%	0%	54%
<b>Paints, sealants and glues</b>	All paints, sealants and fillers for construction; only some are with active substances	6, 7	1,2,3	2,851	91,208	87%	8%	0%	15%
<b>Plastic products with film (surface) preservatives</b>	Primarily PVC products with plasticizers and thereby presumably active substances	7	2,3		14,461	99%	78%	1%	1%
<b>Articles with hygienic surfaces</b>	Refrigerators, dishwashing machines and kitchen utensils, some of which may contain film preservatives, etc.	2, 4,7, 9	2,3	40,782	69,286	97%	54%	1%	1%
<b>Detergents in aquatic solutions</b>	Various cleaning detergents	6	2	3,668	127,543	79%	4%	0%	19%
<b>Cleaning materials</b>	Mops, sponges and vacuum cleaners, some of which could perhaps contain film preservatives	7	3	4,419	7,950	99%	96%	1%	1%
<b>Office supplies and electronics</b>	Various office supplies with plastic surfaces, some of which could perhaps contain film preservatives	7	3	5,576	13,177	95%	70%	1%	5%
<b>Other building materials/appliances</b>	Polyurethane products and rubber for construction, some of which could perhaps contain film preservatives and organic insulation materials which generally contain active substances	7	2,3	7,526	179,829	87%	31%	0%	1%
<b>Textiles</b>	Various apparels, housing textiles, tarpaulins and awnings, some of which could perhaps contain film preservatives, and wool products for extra EU import may likely be moth proofed	9, 18,19	2,3	90,991	71,883	93%	59%	8%	1%
<b>Wet blue hides and other hides</b>	Hide and skin raw materials, generally with active substance contents	9	1	84	21,292	100%	0%	0%	0%

<b>Paper products with intentional addition of preservatives or film preservatives</b>	Various impregnated, covered or otherwise treated paper qualities, some of which could perhaps include film preservatives	7,9	3	4,754	192,197	21%	16%	0%	8%
<b>Stuffed animals [taxidermist works]</b>	Stuffed animals [taxidermy works] with active substances	22	1	(not found)					
<b>Toilet/bathroom appliances and materials</b>	Various plastic utensils and toilet paper, some of which may contain active substances, and diapers and tissues, some of which do contain active substances	7	2,3	3,794	77,042	96%	78%	1%	1%

Notes:\*1: The likelihood of finding active substances in the products vary much between product categories with each main category; see Annex 3 for details. \*2: Legend for active substance presence indicator: 1: The articles are considered always to contain active substances, 2: Active substances may present perhaps in a significant part of the products marketed, and 3: Active substances may be present, but probably in a small part of the products marketed.

### **3.1 Biocidal active substances that may be present in imported articles from Asia**

Very limited information is available on the presence of biocidal active substances in articles imported from countries outside the EU. One of the questions for this survey has been whether it can be expected that articles imported from Asia may contain active substances which are different from the active substances applied in the EU. However, it has been beyond the scope of the survey to make a detailed assessment of the biocide market in Asia. Some preliminary information has been collected from countries where suppliers' web-sites are in English (India, Singapore, and Malaysia) and from Chinese manufacturers advertising on Chinese websites in English.

According to Obbotson (2009) the Indian specialty biocide market is dominated by multinational companies, with very few local suppliers. The main areas of biocide use are water treatment (which comprises of cooling water, pulp and paper applications, oilfield and gas field applications, and recreational water) which is the largest consumption field for both single and formulated biocidal products in India. Other industries which consume significant volumes of biocidal products include wood preservation, household, industrial and institutional cleaning products, hospital surface and medical instrument disinfection and leather tanning. Specialty biocide consumption in industrial applications is significant in paints and coatings as well as marine antifouling coatings, and to a lesser extent in metalworking fluids, synthetic latex polymers, adhesives, sealants and plastics and resins. Paints and coatings consume the greatest volume of formulated biocidal products in India, accounting for over 90% of the formulated biocidal products market. In-can formulated preservatives typically include formaldehyde and formaldehyde releasers, as well as 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-4-isothiazolin-3-one (CIT/MIT), whereas dry-film fungicides contain octyl-isothiazolinone (OIT), diurons, and carbendazim. These are the same active agents as used on the Danish and European market. Domestic manufacturers typically supply "quats" which are particularly effective in disinfectant and sanitizer applications as they provide a combination of biocidal and detergency properties. Leading multinational companies operating in India include Clariant, Lanxess, Dow Chemicals (Rohm & Haas), Arch Chemicals (now Lonza), Thor and the Troy Group. Clariant and Lanxess manufactures single active substances and formulated biocidal products in India, whilst Dow and Thor, for example, import all specialty biocides into the India market (Obbotson, 2009).

The fact that the large international manufacturers dominate the large Indian market for speciality biocides that may end up in articles traded internationally, could indicate that this may also be the case for other countries in the region (excluding China). Large manufacturers of biocidal products operating on the global market are among other Troy Corporation (incl. sites in e.g. Brazil, China and Thailand), Lonza (incl. sales offices in India, China, South East Asia, South America), DOW (incl. sites in e.g. China, Thailand and India), and Thor (incl. sales offices in China, Malaysia, Brazil).

Whereas the speciality biocide market may be dominated by the international manufacturers, the market for inorganic biocidal products used for wood preservation and sapstain preservatives may be more dominated by local manufacturers. Very limited information has been obtained, but impregnated or preserved wood may likely to some extent contain other biocidal active substances than currently applied in the EU.

The Singapore based manufacturer of biocidal products, PCTS (2012) mentioned above lists biocidal products for a range of applications, but chemical names and CAS numbers of active substances are not provided.

The market for biocidal product in China is probably much different, as the Chinese chemical market in general is dominated by a large number of smaller, domestic manufacturers. Non-agricultural

pesticides are in China regulated as “public health pesticides and rodenticides” and all pesticides must be registered with the “Institute for the control of agrochemicals“ under the Ministry of Agriculture (ICAMA) (Huang and Wan, 2011). The ICAMA has a Product Register with a database which can be searched via the Internet. The database cannot provide active substances by application areas however, but biocidal product names (without CAS numbers) by manufacturer, provided that the manufacturer name is known<sup>3</sup>. A search demonstrated that 51 manufacturers with “city” included in the name were registered (not the address), indicating that the total number of manufacturers is quite high. As the pesticides are indicated without CAS numbers and application areas it is difficult to extract information on marketed biocidal products, and this has been beyond the scope of this survey.

Examples of biocidal products from major international manufacturers, according to product catalogues provided at their Asian web-sites (but not necessarily specific for the Asian market), are shown in the table below. Besides, biocidal products marketed by a few Chinese manufacturers of biocidal products are indicated. The substances marketed by the Chinese manufacturers are the same as marketed by the international manufacturers, but not necessarily of same quality.

The list includes 29 different active substances, which are all included in the Review programme under the BPD.

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<sup>3</sup> <http://www.chinapesticide.gov.cn/service/asp/e3.aspx>



**TABLE 7**  
**EXAMPLES OF BIOCIDAL ACTIVE SUBSTANCES THAT MAY BE PRESENT IN MARKETED ARTICLES**

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	In-Can Biocides	Formaldehyde	50-00-0		0.05-0.15	Nipacide FC	Clariant *1
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT)	2634-33-5	9.25	0.1 - 0.3	Proxel™ AQ Preservative	Clariant *5
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT)	2634-33-5	20	0.05 - 0.15	Proxel™ BD20 Preservative	Arch Lonza *2
6	Paint, inks, caulks, sealants, adhesives	1,2-Benzisothiazolin-3-one (BIT)	2634-33-5	19.3	0.05 - 0.15	Proxel® GXL Preservative	Arch Lonza *2
6	In-Can Biocides	AgCl on TiO <sub>2</sub>	7783-90-6 98084-96-9		0.05- 0.2	Nipacide JLP 10	Arch Lonza *2
6	In-Can Biocides	AgCl 00 1102 DBDCS	7783-90-6		0.05- 1.2	Nipacide JMDB 46	Arch Lonza *2
6	In-Can Biocides	AgCl on 002; BIT	7783-90-6		0.06- 0.2	Nipacide JMBT 11	Arch Lonza *2
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.2- 0.4	Nipacide BIT 10 W	Arch Lonza *2
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.01 - 0.05	Nipacide BIT	Arch Lonza *2
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.1 -0.25	Nipacide BIT 20 DPG	Arch Lonza *2
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.1 - 0.25	Nipacide BIT 20	Arch Lonza *2
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.1 -0.25	Nipacide BIT 20 LV	SinoHarvest *7
6	In-Can Biocides	Benzisothiazolinone (BIT)	82385-42-0		0.1 -0.25	Nipacide BIT AS 20	SinoHarvest *7
6	In-Can Biocides	BIT DBDCB	82385-42-0		0.1 - 0.3	Nipacide DB	SinoHarvest *7

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	In-Can Biocides	BIT DBDCB	82385-42-0		0.1 - 0.3	Nipacide DBS	Qingdao IRO TAIHE *8
6	In-Can Biocides	BIT MIT	82385-42-0		0.2- 0.4	Nipacide BSM	Qingdao IRO TAIHE *8
6	In-Can Biocides	BIT OPP	82385-42-0		0.1 -03	Nipacide OBS	Qingdao IRO TAIHE *8
6	In-Can Biocides	BIT CMIT/MIT Formaldehyde	82385-42-0 55965-84-9 50-00-0		0.1 -0.3	Nipacide BFC	Qingdao IRO TAIHE *8
6	In-Can Biocides	BIT CMIT/Mrr Bronopol	82385-42-0 55965-84-9 52-51-7		0.1 -0.3	Nipacide CBB	SinoHarvest *7
6	In-Can Biocides	BIT CMIT/MIT	82385-42-0 55965-84-9		0.1 -0.3	Nipacide CBX 10	Arch Lonza *2
6	In-Can Biocides	BIT HHT	82385-42-0 4719-04-4		0.1 - 0.3	Nipacide TBX	Arch Lonza *2
6	In-Can Biocides	BIT HHT	82385-42-0 4719-04-4		0.1 - 0.3	Nipacide TBXB	Arch Lonza *4
6	In-Can Biocides	BIT MIT	82385-42-0 2682-20-4		0.1 - 0.3	Nipacide BSM 2	Arch Lonza *2
6	In-Can Biocides	BIT OPP	82385-42-0 90-43-7		0.1 - 0.3	Nipacide OBS LV	Arch Lonza *4
6	In-Can Biocides	Bri CMIT/MIT	- 55965-84-9		0.1 - 0.3	Nipacide CBX A	Arch Lonza *2
6	In-Can Biocides	Bronopol	52-51-7		0.05- 0.16	Nipacide BNPD	Arch Lonza *4

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	In-Can Biocides	CMIT/MIT	55965-84-9		0.005 - 0.01	Nipacide CI	SinoHarvest *7
6	In-Can Biocides	CMIT/MIT 0-formal	55965-84-9 -		0.1 - 0.2	Nipacide CFX 2	Clariant *1
6	In-Can Biocides	CMIT/Mrr Bronopol	55965-84-9 52-51-7		0.1 - 0.3	Nipacide CFB	Clariant *1
6	In-Can Biocides	CMIT/MIT	55965-84-9		0.06- 0.1	Nipacide CI 15 MV	Clariant *1
6	In-Can Biocides	CMIT/MIT Formaldehyde	55965-84-9 50-00-0		0.1 - 0.2	Nipacide CFX 4	Clariant *1
6	In-Can Biocides	CMIT/Mrr Bronopol	55965-84-9 52-51-7		0.1 - 0.3	Nipacide KBS	Clariant *1
6	In-Can Biocides	CMIT/MIT	55965-84-9		0.05-0.1	Nipacide CI 15	Clariant *1
6	In-Can Biocides	CMIT/Mrr Bronopol	55965-84-9 52-51-7		0.1 -0.2	Nipacide IB	Clariant *1
6	In-Can Biocides	HHT (Hexahydrothiazine)	04-04-4719		0.05- 0.3	Nipacide BK	Clariant *1
6	In-Can Biocides	IPBC	55406-53-6		0.1 - 0.3	Nipacide IPBC 20	Clariant *1
6	In-Can Biocides	IPBC	55406-53-6		0.1 - 0.3	Nipacide IPBC 30	Clariant *1
6	In-Can Biocides	IPBC	55406-53-6		0.1 - 0.2	Nipacide IPBC 40	Clariant *1
6	All personal care preparations	Liquid blend of phenoxyethanol and organic acids				Microcare® BDP	Clariant *1
6	In-Can Biocides	Mixture of different actives			1.0- 3.0	Nipacide System-cleane	Clariant *5
6	Wet State Preservation, Building products	Mixture of 5-chloro-2-methyl-2 H -isothiazol-3-one and 2-methyl-2 H -isothiazol-3-one	55965-84-9	1.5	0.1 - 0.3	Proxel™ 101 Pre-servative	Clariant *5

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	Wet State Preservation, Building products	Mixture of 5-chloro-2-methyl-2 H -isothiazol-3-one and 2-methyl-2 H -isothiazol-3-one	55965-84-9 50-00-0	1.3 (CMIT/MIT) 3.5 (Formaldehyde)	0.1 - 0.3	Proxel™ 106 Preservative	Clariant *5
6	In-Can Biocides	Octylisothiazolinone			0.1 - 0.6	Nipacide OIT	Clariant *5
6	In-Can Biocides	CMIT/MIT Formaldehyde	55965-84-9 50-00-0		0.1 -0.2	Nipacide CFX 3	Clariant *1
6	In-Can Biocides	o-Phenylphenol	90-43-7		0.1 - 0.3	Nipacide OPP	Clariant *1
6	In-Can Biocides	p-Chloro-m-cresol			0.1 - 0.5	Nipacide PC	Clariant *1
6	In-Can Biocides	Sodium o-phenylphenol			0.1 -0.3	Nipacide SOPP	Clariant *1
6	Paint Preservatives	Formaldehyde	50-00-0		0.1 — 0.3	Nipacide FC	Clariant *1
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT)	2634-33-5	20	0.05 - 0.15	Proxel™ GXL Preservative	Clariant *1
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT) + 2-Bromo-2-nitropropan-1,3-diol (BNP)	2634-33-5 52-51-7	13.5 (BIT) 6.5 (BNP)	0.05 - 0.2	Proxel™ BN Preservative	Clariant *1
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT) + Hexahydro-1,3,5-tris (2-hydroxyethyl)-S-triazine (HHT)	2634-33-5 4719-04-4	5 (BIT) 51 (HHT)	0.05 - 0.2	Proxel™ TN Preservative	Clariant *1
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT) 2-methyl-2H-isothiazol-3-one (MIT)	2634-33-5 2682-20-4	4 (BIT) 1 (MIT)	0.1 - 0.3	Proxel™ MB4 Preservative	Clariant *5
6	Wet State Preservation, Building products	1,2-Benzisothiazolin-3-one (BIT) + Zinc pyrithione (ZPT)	2634-33-5 13463-41-7	5.5 (BIT) 5.5 (ZPT)	0.05 - 0.3	Proxel™ BZ Plus Preservative	Clariant *1

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	Wet State Preservation, Building products	1,2-Benzisothiazoline-3-one (BIT) 3:1 mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (CMIT) and 2-methyl-2H-isothiazol-3-one (MIT)	2634-33-5 55965-84-9	5 (BIT) 1 (CMIT/MIT)	0.05 - 0.2	Proxel™ BC Preservative	Clariant *5
6	Among other things; shampoos and other hair care products	2-Methyl-4-Isothiazolin-3-one	2682-20-4	99 %	not indicated	2-Methyl-4-Isothiazolin-3-one (MIT)	Clariant *5
6	Wet state preservative	2-n-Octyl-4-Isothiazolin-3-One	26530-20-1	95 %	not indicated	2-Octyl-2h-Isothiazol-3-One (OIT)	Clariant *5
6	Used in paints	2-n-Octyl-4-Isothiazolin-3-One	26530-20-1	> 99 %	not indicated	OIT	Clariant *5
6	Used in paints	5-Chloro-2-Methyl-4-Isothiazolin-3-One 2-Methyl-4-Isothiazolin-3-One	26172-55-4 2682-20-4	Min. 14 % Min 1.5 %	not indicated	CMIT/MIT	Clariant *5
6	Paint Preservatives	BIT	2634-33-5		0.01 — 0.05	Nipacide BIT	Clariant *1
6	Paint Preservatives	BIT	2634-33-5		0.1 — 0.25	Nipacide BIT 20	THOR (Malaysia) *6
6	Paint Preservatives	BIT	2634-33-5		0.1 — 0.25	Nipacide BIT AS20	THOR (Malaysia) *6
6	Paint Preservatives	BIT	2634-33-5		0.2— 0.4	Nipacide BIT IOW	Arch Lonza *2
6	Paint Preservatives	BIT CMIT/MIT	2634-33-5 55965-84-9		0.1 — 0.3	Nipacide CBX10	Arch Lonza *2
6	Paint Preservatives	BIT CMIT/MIT	2634-33-5 55965-84-9		0.1 — 0.3	Nipacide CBXA	Clariant *5
6	Paint Preservatives	BIT MIT	2634-33-5 2682-20-4		0.2— 0.4	Nipacide BSM	Clariant *5

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6	Used in paints	Carbendazim Diuron OIT	10605-21-7 330-54-1 26530-20-1	10 % 22 % 3.1 %	not indicated	CDO	Clariant *5
6	Paint Preservatives	CMIT/MIT	55965-84-9		0.1 —0.4	Nipacide C115	Clariant *5
6	Paint Preservatives	CMIT/MIT	55965-84-9		0.1 — 0.4	Nipacide C115MV	Qingdao IRO TAIHE *8
6	Paint Preservatives	CMIT/MIT	55965-84-9		0.005—0.01	NipacideCl	Qingdao IRO TAIHE *8
6	Paint Preservatives	CMIT/MIT Formaldehyde	55965-84-9 50-00-0		0.1 — 0.3	Nipacide CFX	Clariant *5
6	Paint Preservatives	CMIT/MIT Formaldehyde	55965-84-9 50-00-0		0.1 — 0.3	Nipacide CFX3	Clariant *1
6	Paint Preservatives	CMIT/MIT Formaldehyde	55965-84-9 50-00-0		0.1 — 0.3	Nipacide HF I	Clariant *1
6	Paint Preservatives	HHT	4719-04-4		0.05—0.3	NipacideBK	Clariant *1
6	Paint Preservatives	OIT			0.1 —0.5	NipacideOIT	Clariant *1
6, 7	Wet-State & Dry Film Preservation, Building Products	Dithio-2,2'-bis(benzmethylamide)	2527-58-4	25	0.2 - 2.0 (coatings, sealants etc) 0.05 - 0.2 (wet state)	Densil™ P Antimi- crobial	Clariant 1)
6, 7	Wet-State & Dry Film Preservation, Building Products	Dithio-2,2'-bis(benzmethylamide) + N'-(3,4-dichlorophenyl)-N,N-dimethyl urea + Methyl N-benzimidazol-2-yl carbamate	2527-58-4 330-54-1 10605-21-7	17 25.5 0.9	0.25 - 2.0	Densil™ CD Anti- microbial	Clariant *5
6, 7	Wet-State & Dry Film Preservation, Building Products	n-Butyl-1,2-benzisothiazolin-3-one (BBIT)	4299-07-4	> 97	0.1 - 0.3 (coatings, sealants etc) 0.02 - 0.05 (wet state)	Densil® DN Anti- microbial	Clariant *1

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
6, 7, 9	Cosmetics and topical medications. It is used as a preservative in paints, textiles, cooling towers, humidifiers, and hide processing. Used as a preservative anti-septic in cleaning agents, paints, and shampoos and other hair products.	2-bromine-2-Nitro-1,3-propane-diol	52-51-7	99 %	not indicated	Bronopol	Clariant *1
6, 7, 9	Among other things; paper pulp, paint, plastic.	2-Bromo-2-Nitro-1, 3-Propanediol	52-51-7	99 %	not indicated	2-Bromo-2-Nitro-1, 3-Propanediol (Bronopol)	Clariant *1
6, 7, 9	Among other things; leather treatment, food, plastics, coatings etc.	Glutaraldehyde	111-30-8	99 %	not indicated	Glutaraldehyde	THOR (Malaysia) *6
6, 9	Water treatment, paper pulp, coating & painting	2-N-Octyl-4-Isothiazolin-3-One	26530-20-1	99 %	not indicated	2-N-Octyl-4-Isothiazolin-3-One (OIT)	Clariant *1
7	Dry-Film Preservation, Building Products	3-(3, 4-Dichlorophenyl) -1, 1-Dimethylurea + Methyl Benzimidazol-2-yl carbamate + 2-n-Octyl-4-Isothiazolin-3 one	330-54-1 10605-21-7 26530-20-1	20 10 2.8	0.5 - 3.0	Densil™ DF Anti-microbial	Arch Lonza *2
7	Dry-Film Preservation, Building Products	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	40	0.25 – 1.25 (coatings) 0.05 up to 0.625 (adhesives)	Omacide™ AQ Fungicide	Arc Lonza *3
7	Dry-Film Preservation, Building Products	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	>97	0.1 up to 0.5 (of wet product)	Omacide™ IPBC 100 Fungicide	Arch Lonza *2
7	Dry-Film Preservation, Building Products	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	30	0.35 - 1.75 (coatings) 0.075 up to 1.0 (adhesives)	Omacide™ IPBC 30 Fungicide	THOR (Malaysia) *6
7	Coating Preservatives	Carbendazim	10605-21-7		0.1 – 0.5	Nipacide CDI	Clariant *1
7	Coating Preservatives	Diuron	330-54-1		0.6 – 4.0	Nipacide DDI	Clariant *5
7	Coating Preservatives	Diuron	330-54-1		0.3 – 2.0	Nipacide DI	Clariant *1

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
7	Coating Preservatives	Carbendazim Diuron OIT	10605-21-7 330-54-1 26530-20-1		0.3 – 2.0	Nipacide DFX	Clariant *1
7	Coating Preservatives	Carbendazim Diuron OIT	10605-21-7 330-54-1 26530-20-1		0.3 – 2.0	Nipacide DFX5	Clariant *1
7	Coating Preservatives	IPBC	55406-53-6		0.5 – 2.0	Nipacide IPBC30	Arch Lonza *4
7	Dry-Film Preservation, Building Products	Sodium Pyrithione (NaPT)	3811-73-2	40	up to 0.5 by weight	Sodium Omadine™ Fungicide	Clariant *1
7	Coating Preservatives	Terbutryn	886-50-0		0.3 – 2.0	Nipacide TBN50	Arch Lonza *4
7	Dry-Film Preservation, Building Products	Zinc Pyrithione (ZPT)	13463-41-7	>95	up to 0.5 by weight	Zinc Omadine™ Powder Antimicrobial	Arch Lonza *3
7	Dry-Film Preservation, Building Products	Zinc Pyrithione (ZPT)	13463-41-7	37	up to 1.0 by weigh	Zinc Omadine™ ZOE Antimicrobial	Arch Lonza *2
7	Coating Preservatives	Zinc Pyrithione; IPBC	13463-41-7		0.15–0.4	Nipacide PZI	Clariant *1
7	Coating Preservatives	Zinc Pyrithione; Terbutryn	13463-41-7		0.1 – 1.0	Nipacide PZT	Clariant *5
7	Hygiene coatings, paper and board, textile or plastics	AgCl on TiO <sub>2</sub>	7783-90-6 13463-67-7		0.005-0.3	JMAC Composite PG	Clariant *5
7	Hygiene coatings, paper and board, textile or plastics	AgCl on TiO <sub>2</sub>	7783-90-6 98084-96-9		0.05-0.5	JMAC LP 10	Clariant *5
7	Hygiene coatings, paper and board, textile or plastics	AgCl on TiO <sub>2</sub>	7783-90-6 98084-96-9		0.05-1.0	JMAC S 10	Clariant *5



PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
7	Dry-film Biocides	Carbenclazim Diuron OIT	10605-21-7 330-54-1 26530-20-1		0.3 - 2.0	Nipacide DFX	Clariant *1
7	Dry-film Biocides	Carbendazim Diuron OIT	10605-21-7 330-54-1 26530-20-1		0.3 - 2.0	Nipacide DFX 1	Clariant *1
7	Coatings, plasters and similar products	Dispersion of DCOIT with Thor AMME™			not indicated	ACTICIDE® DCA 10	Clariant *1
7	Interior and exterior coatings, timber protection products, adhesives, fillers and sealants	Dispersion of IPBC with Thor AMME™			not indicated	ACTICIDE® IPA 20	Clariant *1
7	Dry-film Biocides	IPBC	55406-53-6		0.5 - 2.0	Nipacide IPBC 30	Clariant *1
7	Dry-film Biocides	IPBC	55406-53-6		0.5 - 2.0	Nipacide IPOC 20	Clariant *1
7	Dry-film Biocides	IPEC OIT	55406-53-6 26530-20-1		0.1 - 0.5	Nipacide SDF	Clariant *1
7	Dry-film Biocides	IPSC	55406-53-6		0.5 - 2.0	Nipacide IPBC 40	Clariant *1
7	Exterior paints, coatings and plasters	Novel algicide/ fungicide combinations with Thor AMME™				ACTICIDE® MKB 3	Clariant *1
7	Dry-film Biocides	TCMTB OIT Terbutryne	21564-17-0 26530-20-1 886-50-0		0.5 - 1.5	Nipacide DFT	Clariant *1
7	Paint, caulks, sealants	Zinc Pyrithione	13463-41-7	48%	up to 1.0 w/w	Zinc Omadine® FPS Dispersion Antimicrobial	Clariant *5
7	Paint, caulks, sealants	Zinc Pyrithione (ZPT)	13463-41-7	>95%	up to 0.5 w/w	Zinc Omadine® Powder Antimi- crobial	SinoHarvest *7

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
7	Dry-film Biocides	Zinc-pyrithione ; IPSC	13463-41-7		0.1 - 1.0	Nipacide PZI	Clariant *1
7	Dry-film Biocides	Zinc-pyrithione ; DCCIT; s-triazine	13463-41-7		0.5 - 2.0	Nipacide DFZ	Clariant *1
7	Dry-film Biocides	Zinc-pyrithione ; Terbutryne	13463-41-7		0.1 - 1.0	Nipacide PZT	Clariant *1
7, 9	For the antimicrobial protection of plastics that can tolerate small amounts of water such, as various latex foams, carpet backings and polyurethane foams	Zinc Pyrithione	13463-41-7	48	0.14 - 0.71	Zinc Omadine® fps Antimicrobial	Arc Lonza *3
9	Used in paper industri for coating etc.	2,2-dibromo-3-nitrido-propanamide	10222-01-2	98 %	not indicated	DBNPA	Arch Lonza *4
9	Control odour and the growth oand action of micro-organisms in textiles	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	>97	0.02-1.0	Omacide™ IPBC 100 Antimicrobial	Arch Lonza *4
9	Control odour and the growth oand action of micro-organisms in textiles	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	>20	0.1-1.25	Omacide™ IPBC 20 Antimicrobial	Arc Lonza *3
9	Control odour and the growth oand action of micro-organisms in textiles	3-Iodo-2-propynyl-n -butylcarbamate (IPBC)	55406-53-6	>40	0.05-2.5	Omacide™ IPBC 40 Antimicrobial	Arch Lonza *4
9	used in chemical, medicine, paper making, flavor, coating	Glyoxal	107-22-2	99 %		Glyoxal	Arc Lonza *3
9	Plastics where a concentrated liquid product is preferred and water is not tolerated, such as PVC, thermoplastics and polyurethanes	N-Butyl-1,2-benzisothiazolin -3-one	4299-07-4	94.5	0.1 - 0.3	Vanquish® 100 Antimicrobial	Arch Lonza *4
9	Control odour and the growth oand action of micro-organisms in textiles	Poly hexamethylene biguanide hydrochloride (PHMB)	27083-27-8 32289-58-0	20	1-4	Reputex™ 20 An- timicrobial	Arc Lonza *3
9	Control odour and the growth oand action of micro-organisms in textiles	Sodium Pyrithione	3811-73-2	40	0.12 - 0.75	Sodium Omadine® 40 Antimicrobial	Arch Lonza *3

PT	Article type (as indicated by the manufacturer – for some applications it is rather the type of biocidal product which is indicated)	Active substance	CAS No	Active Content (%)	Typical dose levels (% of agent)	Biocidal product name	Manufacturer
9	For the protection of sponges and rigid polyurethane foams, such as insulation that can tolerate water	Sodium Pyrithione	3811-73-2	40	0.12 - 0.75	Sodium Omadine® 40 Fungicide	Arch Lonza *2
9	Control odour and the growth and action of micro-organisms in textiles	Zinc Pyrithione	13463-41-7	48	0.14 - 0.71	Zinc Omadine® 40 Antimicrobial	Arch Lonza *2
9	For the protection of plastics that cannot tolerate water, such as PVC, plastisol formulations and other thermoplastics	Zinc Pyrithione	13463-41-7	95 min.	0.05 - 0.35	Zinc Omadine® Powder Antimicrobial	Arch Lonza *3
9	Control odour and the growth and action of micro-organisms in textiles	Zinc Pyrithione	13463-41-7	>95	0.05 - 0.35	Zinc Omadine® Powder Antimicrobial	Clariant *5
9	For the protection of plastics that can tolerate small amounts of water, such as latex carpet backings	Zinc Pyrithione	13463-41-7	37.6	0.1 - 0.7	Zinc Omadine® ZOE Antimicrobial	Clariant *5
9	Control odour and the growth and action of micro-organisms in textiles	Zinc Pyrithione	13463-41-7	37	0.1 - 0.7	Zinc Omadine® ZOE Antimicrobial	Clariant *1
9	For the protection of polyurethane products including foams, elastomers, binders, adhesives and coatings that cannot tolerate water	Zinc Pyrithione	13463-41-7	18	0.5 - 1.5	Zinc Omadine® ZPG Intermediate	Clariant *1
9	For the protection of plastics where strong bacterial and fungal performance is required, such as vinyl flooring, marine and soil burial applications	Zinc Pyrithione and N-Butyl -1,2-benzisothiazolin-3-one	13463-41-7 4299-07-4	4.75 each (9.5 total)	1 - 3	Vanquish® SL 10 Antimicrobial	Clariant *1

\*1 Clariant - Your Choice for Product Preservation - Industrial Biocides, Edition 2009

\*2 Arch Lonza - Biocide selection guide - Building Products (India)

\*3 Arch Lonza - Biocide selection guide - Plastics & Flooring

\*4 Arch Lonza - Textiles Biocide Selection guide

\*5 Clariant - Nipacide - Paints & coatings (India)

\*6 Thor specialites sdn. bhd. Malaysia - <http://3881.my.all.biz>

\*7 SinoHarvest China - <http://www.sinoharvest.com>

\*8 Qingdao IRO TAIHE International Trade Co., Ltd. - <http://www.iro-taihe.com/>

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Arch Lonza: [www.archchemicals.com](http://www.archchemicals.com); [www.lonza.com](http://www.lonza.com)

Thor specialites sdn. bhd. Malaysia: <http://3881.my.all.biz>

Thor Chemicals: [www.thor.com](http://www.thor.com)

SinoHarvest China: [www.sinoharvest.com](http://www.sinoharvest.com)

DOW: [www.dow.com](http://www.dow.com)

Troy Corporation: [www.troycorp.com](http://www.troycorp.com)

PCTS Speciality Chemicals Pte Ltd: [www.pcts.com.sg](http://www.pcts.com.sg)

## Annex 1: Substances registered in the Danish Product Registry

The following table indicates active substances registered in the Danish Product Registry as used in biocidal products by three or more companies and in four or more mixtures.

Name (EINECS and/or others)	EC number	CAS number
Boric acid	233-139-2	10043-35-3
Geraniol	203-377-1	106-24-1
Glutaral	203-856-5	111-30-8
Zineb	235-180-1	12122-67-7
2-Phenoxyethanol	204-589-7	122-99-6
Copper oxide	215-269-1	1317-38-0
Dicopper oxide	215-270-7	1317-39-1
Pyrithione zinc	236-671-3	13463-41-7
Bis(1-hydroxy-1H-pyridine-2-thionato-O,S)copper	238-984-0	14915-37-8
D-gluconic acid, compound with N,N"-bis(4-chlorophenyl)-3,12-diimino-2,4,11,13-tetraazatetradecanediamidine (2:1)	242-354-0	18472-51-0
N-(3-aminopropyl)-N-dodecylpropane-1,3-diamine	219-145-8	2372-82-9
Potassium (E,E)-hexa-2,4-dienoate	246-376-1	24634-61-5
Polymer of N-Methylmethanamine (EINECS 204-697-4 with (chloromethyl)oxirane (EINECS 203-439-8) / Polymeric quaternary ammonium chloride	Polymer	25988-97-0
1,2-benzisothiazol-3(2H)-one	220-120-9	2634-33-5
2-octyl-2H-isothiazol-3-one	247-761-7	26530-20-1
2-methyl-2H-isothiazol-3-one	220-239-6	2682-20-4
Monohydro chloride of polymer of N,N"-1,6-hexanediylbis[N'-cyanoguanidine] (EINECS 240-032-4) and hexamethylenediamine (EINECS 204-679-6)	Polymer	27083-27-8
N'-tert-butyl-N-cyclopropyl-6-(methylthio)-1,3,5-triazine-2,4-diamine	248-872-3	28159-98-0
<u>Poly(hexamethylenebiguanide) hydrochloride</u>		32289-58-0
Triclosan	222-182-2	3380-34-5
(ethylenedioxy)dimethanol	222-720-6	3586-55-8
Formaldehyde	200-001-8	50-00-0
Sodium dichloroisocyanurate dihydrate	220-767-7	51580-86-0
Bronopol	200-143-0	52-51-7
3-iodo-2-propynyl butylcarbamate	259-627-5	55406-53-6

Name (EINECS and/or others)	EC number	CAS number
Mixture of 5-chloro-2-methyl-2H-isothiazol-3-one (EINECS 247-500-7) and 2-methyl-2H-isothiazol-3-one (EINECS 220-239-6)	Mixture	55965-84-9
Cyclohexene,1-methyl-4-(1-methylethenyl)-, (4R)-	227-813-5	5989-27-5
1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole / Propiconazole	262-104-4	60207-90-1
Quaternary ammonium compounds, benzyl-C8-18-alkyldimethyl, chlorides	264-151-6	63449-41-2
Ethanol	200-578-6	64-17-5
Formic acid	200-579-1	64-18-6
Benzoic acid	200-618-2	65-85-0
Propan-2-ol	200-661-7	67-63-0
Quaternary ammonium compounds, benzyl-C12-18-alkyldimethyl, chlorides	269-919-4	68391-01-5
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides	270-325-2	68424-85-1
Salicylic acid	200-712-3	69-72-7
Pentapotassium bis(peroxymonosulphate) bis(sulphate)	274-778-7	70693-62-8
Propan-1-ol	200-746-9	71-23-8
Didecyldimethylammonium chloride	230-525-2	7173-51-5
Dichloro-N-[(dimethylamino)sulphonyl]fluoro-N-(p-tolyl)methanesulphenamide / Tolyfluanid	211-986-9	731-27-1
Ethylene oxide	200-849-9	75-21-8
Iodine	231-442-4	7553-56-2
Silicon dioxide – amorphous	231-545-4	7631-86-9
Hydrogen chloride / Hydrochloric acid	231-595-7	7647-01-0
Sodium hypochlorite	231-668-3	7681-52-9
Hydrogen peroxide	231-765-0	7722-84-1
Copper sulphate	231-847-6	7758-98-7
Sodium chlorate	231-887-4	7775-09-9
Calcium hypochlorite	231-908-7	7778-54-3
Citric acid	201-069-1	77-92-9
Peracetic acid	201-186-8	79-21-0
L-(+)-lactic acid	201-196-2	79-33-4
Alkyl-benzyl-dimethylammonium chloride / Benzalkonium chloride	Mixture	8001-54-5
Quaternary ammonium compounds, benzyl-C12-14-alkyldimethyl, chlorides	287-089-1	85409-22-9



Name (EINECS and/or others)	EC number	CAS number
Symclosene	201-782-8	87-90-1
Terbutryn	212-950-5	886-50-0

## **Annex 2: The Products Registry's function code descriptions**

The list of function codes largely (yet with some exceptions) reflects the product types (PT) of the Biocidal Products Directive, Annex V.

B15110 Human hygiene biocidal products (PT1) - Chemicals and products in this group are biocidal products used for human hygiene purposes.

B15120 Private area and public health area disinfectants and other biocidal products (PT2) - Chemicals and products used for the disinfection of air, surfaces, materials, equipment and furniture which are not used for direct food or feed contact in private, public and industrial areas, including hospitals, as well as products used as algaecides."Usage areas include, inter alia, swimming pools, aquariums, bathing and other waters; air-conditioning systems; walls and floors in health and other institutions; chemical toilets, waste water, hospital waste, soil or other substrates (in playgrounds).".

B15130 Veterinary hygiene biocidal products (PT3) - Chemicals and products in this group are biocidal products used for veterinary hygiene purposes including products used in areas in which animals are housed, kept or transported.

B15140 Food and feed area disinfectants (PT4) - Chemicals and products used for the disinfection of equipment, containers, consumption utensils, surfaces or pipework associated with the production, transport, storage or consumption of food, feed or drink (including drinking water) for humans and animals.

B15142 Sanitation agents for toilets.

B15150 Drinking water disinfectants (PT5) - Chemicals and products used for the disinfection of drinking water (for both humans and animals).

B15310 In-can preservatives (PT6) - Chemicals and products used for the preservation of manufactured products, other than foodstuffs or feedingstuffs, in containers by the control of microbial deterioration to ensure their shelf life.

B15315 Wood preservatives (PT8) - Chemicals and products used for the preservation of wood, from and including the saw-mill stage, or wood products by the control of wood-destroying or wood-disfiguring organisms. This product type includes both preventive and curative products.

B15320 Film preservatives (PT7) - Chemicals and products used for the preservation of films or coatings by the control of microbial deterioration in order to protect the initial properties of the surface of materials or objects such as paints, plastics, sealants, wall adhesives, binders, papers, art works.

B15330 Fibre, leather, rubber and polymerised materials preservatives (PT9) - Chemicals and products used for the preservation of fibrous or polymerised materials, such as leather, rubber or paper or textile products and rubber by the control of microbiological deterioration.

B15340 Masonry preservatives (PT10) - Chemicals and products used for preservation and remedial treatment of masonry or other construction materials other than wood by the control of microbiological and algal attack.

B15350 Preservatives for liquid-cooling and processing systems (PT11) - Chemicals and products used for the preservation of water or other liquids used in cooling and processing systems by the control of harmful organisms such as microbes, algae and mussels. Products used for the preservation of drinking water are not included in this product type.

B15360 Slimicides (PT12) - Chemicals and products used for the prevention or control of slime growth on materials, equipment and structures, used in industrial processes, e.g. On wood and paper pulp, porous sand strata in oil extraction.

B15370 Metalworking-fluid preservatives (PT13) - Chemicals and products used for the preservation of metalworking fluids by the control of microbial deterioration.

B15510 Rodenticides (PT14) - Chemicals and products used for the control of mice, rats or other rodents.

B15520 Avicides (PT15) - Chemicals and products used for the control of birds.

B15530 Molluscicides (PT16) - Chemicals and products used for the control of molluscs.

B15540 Piscicides (PT17) - Chemicals and products used for the control of fish; these products exclude products for the treatment of fish diseases.

B15550 Insecticides, acaricides and products to control other arthropods (PT18) - Chemicals and products used for the control of arthropods (e.g. Insects, arachnids and crustaceans).

B15560 Repellents and attractants (PT19) - Chemicals and products used to control harmful organisms (invertebrates such as fleas, vertebrates such as birds), by repelling or attracting, including those that are used for human or veterinary hygiene either directly or indirectly.

B15710 Preservatives for food or feedstocks (PT20) - Chemicals and products used for the preservation of food or feedstocks by the control of harmful organisms.

B15720 Antifouling (PT21).

B15730 Embalming and taxidermist fluids (PT22) - Chemicals and products used for the disinfection and preservation of human or animal corpses, or parts thereof.

B15740 Control of other vertebrates (PT23) - Chemicals and products used for the control of vermin.

### Annex 3: Treated article types included in trade analysis

The following table indicates for each group of treated articles the background for the considerations regarding the possible presence of biocidal active substances in the articles. Ref.# provides the reference over to the trade statistics in Annex 4 and the list of commodities in Annex 5

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>A</b>	<b>Treated wood articles</b>		
<b>A1</b>	Impregnated wood for construction, marine construction, etc.	8	Manufacturers' websites
<b>A2</b>	Vacuum impregnated wooden doors, windows and similar	8	Manufacturers' websites
<b>A3</b>	Timber preserved with anti-sapstain preservatives	8	Background knowledge on pentachlorophenol use
<b>A4</b>	Wood pallets with anti-sapstain preservatives	8	Background knowledge on pentachlorophenol use
<b>A5</b>	Garden furniture and other wood products, which may be surface coated with preservatives	8	Background knowledge
<b>B</b>	<b>Metalworking-fluids marketed with biocide contents for in-use preservation</b>		
<b>B1</b>	Metalworking-fluids marketed with biocide contents for in-use preservation	13	Not confirmed if the fluid is generally sold with biocide added. BPD, annex V: Biocides are added as preservatives to metalworking fluids based on emulsions, synthetic or semi-synthetic fluids and fluids based on pure vegetable oils. Metalworking fluids based on pure mineral oils and solvent-based liquids contain in general no biocides.
<b>C</b>	<b>Paints, sealants and glues</b>		
<b>C1</b>	Paints, binders, water based	6	(EC, 2012b), (Milieu and DTC, 2006)
<b>C2</b>	Pre-made fillers, water based	6	(EC, 2012b) and background knowledge
<b>C3</b>	Sealants for outdoor and wetroom use with film preservatives	6,7	(EC, 2012b), (Milieu and DCT, 2006)
<b>C4</b>	Water based adhesives	6	(EC, 2012b), (Milieu and DTC, 2006)

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>C5</b>	Paints for outdoor or wetroom application with surface "film" preservative	6	(EC, 2012b)
<b>D</b>	<b>Plastic products with film (surface) preservatives:</b>		<b>"Film preservatives" protect the finished surface against microbial degradation and algae growth on polymer materials, including some paint types.</b>
<b>D1</b>	PVC roof and pond foils; PVC bathroom curtains	7	(BPD, Annex V) and manufacturers' websites
<b>D2</b>	Bags of PVC coated fabric ("vinyl" sports bags and others)	7	Manufacturers' websites; article type not confirmed to include biocides
<b>D3</b>	Baby nursing pads/changing stations, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>D4</b>	PVC (vinyl) flooring and wall covering (some types, incl. for wetrooms, busses, institutions)	7	(BPD, Annex V), (KemI, 2012) and background knowledge
<b>D5</b>	Bath mats [likely PVC]	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>D6</b>	Shower hoses, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>D7</b>	Children's scissors, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>D8</b>	Fitness balls, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>D9</b>	PVC coated tents (primarily large tents, festival tents, party tents, etc.) and PVC tarpaulins	7	(BPD, Annex V) and background knowledge
<b>D10</b>	Furniture of PVC coated fabric ("vinyl" and others)	7	Manufacturers' websites; article type not confirmed to include biocides
<b>D11</b>	Other PVC/polymer products potentially treated with film preservatives		
<b>E</b>	<b>Articles that may come into contact with food:</b>	<b>7</b>	<b>(EC, 2012b)</b>
<b>E1</b>	Cutting boards, food boxes and salad bowls [kitchen use], with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
E4	Dish washing brushes, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
E5	Dishwashing machines	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
E6	Plastic bags [kitchen use], with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
E7	Baby's bottles	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
E8	Refrigerators and freezers	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
E9	Knives [kitchen], with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>F</b>	<b>Detergents in aquatic solutions</b>		
F1	Detergents in aquatic solutions	6	Background knowledge; article type not confirmed to include biocides
<b>G</b>	<b>Cleaning materials:</b>		(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
G1	Mops and cleanings cloths with film preservatives		
G2	Sponges, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
G3	Washing balls, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
G4	Vacuum cleaners, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H</b>	<b>Office supplies and electronics:</b>		

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>H1</b>	Pencils, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H2</b>	Computer keyboards, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H3</b>	Computer mice, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H4</b>	headsets, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H5</b>	Mobile phone covers, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>H6</b>	Pocket calculators, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>I</b>	<b>Other building materials/appliances</b>		
<b>I1</b>	Stone [quarts]/polymer slabs for kitchen table use	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>I2</b>	Polyurethane foam [for mattresses and furniture, etc.]	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>I3</b>	Rubber foam insulation for plumbing	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>I4</b>	Rubber foils for ponds and roofing	9	(BPD, Annex V) and background knowledge
<b>I5</b>	Rubber sealing rings for sewer and water pipes	9	(BPD, Annex V)
<b>I6</b>	Paper insulation (fibre)	9	(BPD, Annex V)
<b>I7</b>	Cellulose insulation, fibre and boards	9	(BPD, Annex V)
<b>I8</b>	Wool insulation (fibre and slabs)	9	(BPD, Annex V)

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>I9</b>	Flax insulation (fibre and slabs)	9	(BPD, Annex V)
<b>I10</b>	Paper-lined plaster (gypsum) boards	9	Background knowledge; article type not confirmed to include biocides
<b>I11</b>	Ceramic tiles with antibacterial surface	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J</b>	<b>Textiles</b>		
<b>J1</b>	Socks, antibacterial	9	(EC, 2012b), (KemI, 2012)
<b>J2</b>	Sportswear, antibacterial	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J3</b>	Underwear, antibacterial	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J4</b>	shoe soles (inlay?), antibacterial	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J5</b>	hats, antibacterial	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J6</b>	gloves, antibacterial	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J7</b>	matresses, mattress covers and top mattresses?	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J8</b>	Pillows	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J9</b>	Bedding	9, 19	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J10</b>	Towels	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used



Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>J11</b>	Furniture, textile	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J12</b>	Curtains	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J13</b>	Textile wall covering	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>J14</b>	Teddy bears	9	
<b>J15</b>	Awnings, sunblinds [markiser]	9	(BPD, Annex V)
<b>J16</b>	Parasols	9	(BPD, Annex V)
<b>J17</b>	Umbrellas	9	Background knowledge; article type not confirmed to include biocides
<b>J18</b>	Sails	9	(BPD, Annex V)
<b>J19</b>	Tents [made of textiles]	9	(BPD, Annex V)
<b>J20</b>	Mosquito nets (with anti-bacterial/fungal biocides but not treated with insecticides)	9	(EC, 2012b); according to EC interpretation, a mosquito net treated with insecticides is a biocidal product. [May perhaps be difficult to distinguish in trade statistics]
<b>J21</b>	Waterproof clothing	9	(BPD, Annex V)
<b>J22</b>	Wool clothing, moth proofed	9	Background knowledge
<b>J23</b>	Wool covered furniture, moth proofed	9	Background knowledge
<b>J24</b>	Wollen carpets and rugs	9	(Milieu and DCT, 2006)
<b>J25</b>	Wet blue hides and other hides	9	(BPD, Annex V) and background knowledge
<b>J26</b>	Paper products with intentional addition of preservatives or film preservatives	7, 9	(BPD, Annex V)
<b>K</b>	<b>Stuffed animals [taxidermist works]</b>		
<b>K1</b>	Stuffed animals [taxidermist works]	22	(BPD, Annex V)

Ref. #	Article type	PT (BPD, Annex V)	Remarks and general references
<b>L</b>	<b>Toilet/bathroom appliances and materials</b>		
<b>L1</b>	Toilet lids, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>L2</b>	Bathtubs and spas, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>L3</b>	Toothbrushes, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>L4</b>	Toilet paper, with biocides	9	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>L5</b>	Toothbrush covers, with film preservatives	7	(KemI, 2012), note that the reference says that biocides can be used in this type of appliances/materials, but not that it always is used
<b>L6</b>	Diapers with antibacterial treatment	?	(EC, 2012b)

## Annex 4: Trade statistics

The tables below summarise data retrieved from the external trade statistics by CN8 (Combined Nomenclature with 8 digits) from the statistics database of Eurostat. The commodity codes used for each article group is shown in Annex 6. “Article type” indicates the types of articles that may contain biocidal active substances, whereas “import categories” indicate the categories from the trade statistics that may included the article types in question. As an example the article type “Timber preserved with anti-sapstain preservatives” is not covered by specific commodity codes, but these articles may be a subset of the commodity group

**TABLE 8**  
IMPORT OF ARTICLES THAT MAY CONTAIN BOCIDES TO DENMARK IN 2011

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>A</b>	<b>Treated wood articles</b>	<b>Impregnated construction wood and windows/doors, other wood products with varying biocide presence</b>	<b>8</b>	<b>1,2</b>	<b>39,612</b>	<b>507,548</b>	<b>84%</b>	<b>65%</b>	<b>1%</b>	<b>1%</b>
<b>A1</b>	Pressure impregnated wood for construction, marine construction, etc.		8	1	2,344	44,024	8%	0%	0%	0%
<b>A2</b>	Vacuum impregnated wooden doors, windows and similar	Windows and doors	8	2	61	29,844	95%	7%	0%	3%
<b>A3</b>	Timber preserved with anti-sapstain preservatives	Timber (not included in A1, A2)	8	3	1,086	271,248	2%	0%	0%	1,086
<b>A4</b>	Wood pallets with anti-sapstain preservatives		8	2	2,032	104,328	13%	1%	0%	12%
<b>A5</b>	Garden furniture and other wood products, which may be surface coated with preservatives	Various furniture in groups including garden furniture	8	2	34,089	58,105	97%	76%	1%	0%
<b>B</b>	<b>Metalworking-fluids marketed with biocide contents for in-use preservation</b>	<b>All lubricants, only few of them are for metal cutting and with biocides (water-containing)</b>	<b>13</b>	<b>1,2</b>	<b>161</b>	<b>11,719</b>	<b>42%</b>	<b>8%</b>	<b>0%</b>	<b>54%</b>

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>B1</b>	Metalworking-fluids marketed with biocide contents for in-use preservation	All lubricants	13	2	161	11,719	42%	8%	0%	54%
<b>C</b>	<b>Paints, sealants and glues</b>	<b>All paints, sealants and fillers for construction; only some are with biocides</b>	<b>6</b>	<b>1,2,3</b>	<b>1,124</b>	<b>91,208</b>	<b>52%</b>	<b>19%</b>	<b>0%</b>	<b>39%</b>
<b>C1</b>	Paints, binders, water based		6	1	274	28,125	3%	3%	0%	96%
<b>C2</b>	Pre-made fillers, water based	Various filler types	6	3	503	16,397	80%	17%	0%	20%
<b>C3</b>	Sealants for outdoor and wetroom use with film preservatives	All sealants	6,7	2	9	8,872	19%	3%	0%	59%
<b>C4</b>	Water based adhesives	Various adhesives	6	2	200	14,748	78%	56%	1%	22%
<b>C5</b>	Paints for outdoor or wetroom application with surface "film" preservative	Various non-water paints	6	2	139	23,065	13%	7%	0%	18%
<b>D</b>	<b>Plastic products with film (surface) preservatives</b>	<b>Primarily PVC products with plasticizers and thereby presumably biocides</b>	<b>7</b>	<b>2,3</b>	<b>26,567</b>	<b>36,157</b>	<b>98%</b>	<b>80%</b>	<b>2%</b>	<b>1%</b>
<b>D1</b>	PVC roof and pond foils; PVC bathroom curtains		7	2	79	971	83%	3%	0%	17%
<b>D2</b>	Bags of PVC coated fabric ("vinyl" sports bags and others)		7	2	7,347	3,086	99%	88%	2%	1%
<b>D3</b>	Baby nursing pads/changing stations, with film preservatives		7	2	(not found)					
<b>D4</b>	PVC (vinyl) flooring and wall covering (some types, incl. for wet rooms, buses, institutions)		7	2	160	4,389	55%	43%	1%	45%
<b>D5</b>	Bath mats [likely PVC]	PVC foam foil	7	2	4	1,049	80%	25%	0%	3%

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>D6</b>	Shower hoses, with film preservatives		7	3	(not specified in complex custom numbers)					
<b>D7</b>	Children's scissors, with film preservatives		7	3	(not specified in complex custom numbers)					
<b>D8</b>	Fitness balls, with film preservatives	All plastic balls	7	3	245	102	99%	85%	1%	1%
<b>D9</b>	PVC coated tents (primarily large tents, festival tents, party tents, etc.) and PVC tarpaulins	PVC tents and other tents of synthetic materials; all tarpaulins	7	2	5,300	3,537	100%	64%	0%	0%
<b>D10</b>	Furniture of PVC coated fabric ("vinyl" and others)	Various plastic furniture	7	3	2,041	1,060	94%	82%	0%	2%
<b>D11</b>	Other PVC/polymer products potentially treated with film preservatives	Various other products of PVC with plasticiser contents	7	2	11,392	21,965	98%	83%	4%	1%
<b>E</b>	<b>Articles that may come into contact with food:</b>	<b>Refrigerators, dishwashing machines and kitchen utensils, some of which may contain film preservatives</b>	<b>7</b>	<b>2,3</b>	<b>37,689</b>	<b>69,286</b>	<b>96%</b>	<b>59%</b>	<b>1%</b>	<b>1%</b>
<b>E1</b>	Cutting boards [kitchen use], with film preservatives		7	3	7,007	13,633	96%	69%	0%	2%
<b>E2</b>	Dish washing brushes, with film preservatives	Various householding utensils for cleaning, etc.	7	3	0	0	0%	0%	0%	0%
<b>E3</b>	Dishwashing machines	All dish washing machines	7	3	1,027	8,302	95%	50%	0%	0%
<b>E4</b>	Plastic bags [kitchen use], with film preservatives		7	3	17,915	28,727	99%	56%	1%	1%
<b>E5</b>	Baby's bottles	Hygienic or pharmaceutical articles of rubber, including soothers	7	3	77	458	99%	79%	0%	1%

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>E6</b>	Refrigerators and freezers	All refrigerators and freezers	7	2	10,891	17,834	92%	55%	0%	0%
<b>E7</b>	Knives [kitchen], with film preservatives	All kitchen and eating knives	7	3	773	331	99%	80%	1%	0%
<b>F</b>	<b>Detergents in aquatic solutions</b>	<b>Various cleaning detergents</b>	<b>6</b>	<b>2</b>	<b>1,438</b>	<b>127,543</b>	<b>39%</b>	<b>10%</b>	<b>0%</b>	<b>50%</b>
<b>F1</b>	Detergents in aquatic solutions	Various cleaning detergents	6	2	1,438	127,543	39%	10%	0%	50%
<b>G</b>	<b>Cleaning materials</b>	<b>Mops, sponges and vacuum cleaners, some of which could perhaps contain film preservatives</b>	<b>7</b>	<b>3</b>	<b>4,418</b>	<b>7,950</b>	<b>99%</b>	<b>96%</b>	<b>1%</b>	<b>1%</b>
<b>G1</b>	Mops and cleanings cloths with film preservatives		7	3	548	1,793	100%	89%	5%	0%
<b>G2</b>	Sponges, with film preservatives		7	3	(not found)					
<b>G3</b>	Washing balls, with film preservatives		7	3	(not found)					
<b>G4</b>	Vacuum cleaners, with film preservatives		7	3	3,870	6,158	99%	97%	0%	1%
<b>H</b>	<b>Office supplies and electronics</b>	<b>Various office supplies with plastic surfaces, some of which could perhaps contain film preservatives</b>	<b>7</b>	<b>3</b>	<b>5,268</b>	<b>11,770</b>	<b>93%</b>	<b>71%</b>	<b>0%</b>	<b>5%</b>
<b>H1</b>	Pencils, with film preservatives	Various pens and pencils	7	3	381	386	100%	94%	0%	0%
<b>H2</b>	Computer keyboards, with film preservatives	Keyboards and laptops	7	3	1,564	4,016	100%	95%	0%	0%
<b>H3</b>	Computer mice, with film preservatives	Various accessories for computers	7	3	1,521	3,778	88%	50%	1%	10%
<b>H4</b>	headsets, with film preservatives		7	3	435	506	99%	89%	0%	1%
<b>H5</b>	Mobile phone covers, with film preservatives	Various mobile phone units	7	3	1,367	3,085	88%	56%	0%	8%
<b>H6</b>	Pocket calculators, with film preservatives		7	3	(not found)					

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>I</b>	<b>Other building materials/appliances</b>	<b>Polyurethane products and rubber for construction, some of which could perhaps contain film preservatives and organic insulation materials which generally contain biocides</b>	7	2,3	7,172	179,726	82%	32%	0%	1%
<b>I1</b>	Stone [quarts]/polymer slabs for kitchen table use		7	3	(not found)					
<b>I2</b>	Polyurethane foam [for mattresses and furniture, etc.]	Various materials of polyurethane or other cell foams	7	3	327	13,837	82%	26%	0%	18%
<b>I3</b>	Rubber foam insulation for plumbing		9	3	(not found)					
<b>I4</b>	Rubber foils for ponds and roofing		9	2	14	289	85%	2%	66%	15%
<b>I5</b>	Rubber sealing rings for sewer and water pipes		9	2	1,084	3,832	95%	86%	2%	4%
<b>I6</b>	Paper insulation (fibre)	Paper pulp produced from recycled paper and cardboard	9	2	1	4,069	0%	0%	0%	0%
<b>I7</b>	Cellulose insulation, fibre and boards	Various wood fibre materials including in boards	9	2	1,155	27,421	68%	9%	0%	0%
<b>I8</b>	Wool insulation (fibre and slabs)	Various wool raw materials	9	2	511	4,783	0%	0%	0%	0%
<b>I9</b>	Flax insulation (fibre and slabs)		9	3	(not found)					
<b>I10</b>	Paper-lined plaster (gypsum) boards		9	3	0	92,540	0%	0%	0%	0%
<b>I11</b>	Ceramic tiles with antibacterial surface	Various stone and tiles	9	3	4,079	32,955	93%	29%	0%	0%

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>J</b>	<b>Textiles and hides</b>	<b>Various apparels, housing textiles, tarpaulins and awnings, some of which could perhaps contain film preservatives, and wool products for extra EU import may likely be moth proofed</b>	<b>9</b>	<b>2,3</b>	<b>83,045</b>	<b>69,670</b>	<b>92%</b>	<b>62%</b>	<b>8%</b>	<b>1%</b>
<b>J1</b>	Socks, antibacterial	All socks	9	3	1,666	1,432	100%	65%	0%	0%
<b>J2</b>	Sportswear, antibacterial	Sport suits and all-synthetic shirts	9	3	3,034	1,397	98%	64%	4%	0%
<b>J3</b>	Underwear, antibacterial	All underwear	9	3	2,277	1,554	99%	73%	3%	0%
<b>J4</b>	Shoe soles (inlay?), antibacterial	Various footwear and soles	9	3	19,982	15,476	98%	61%	5%	0%
<b>J5</b>	Hats, antibacterial	All hats	9	3	61	59	99%	89%	3%	1%
<b>J6</b>	Gloves, antibacterial	All gloves	9	3	2,617	482	100%	51%	3%	0%
<b>J7</b>	Mattresses, mattress covers and top mattresses?		9	3	8,734	13,720	59%	46%	10%	10%
<b>J8</b>	Pillows		9	3	(not found)					
<b>J9</b>	Bedding	Various bedding items	9,19	3	8,386	2,824	84%	23%	17%	0%
<b>J10</b>	Towels	All towels	9	3	3,502	973	86%	13%	35%	0%
<b>J11</b>	Furniture, textile	Various chairs, including for vehicles	9	3	20,889	23,391	98%	91%	0%	0%
<b>J12</b>	Curtains	All curtains and similar	9	3	2,313	1,198	100%	97%	0%	0%
<b>J13</b>	Textile wall covering	Various wall covering materials	9	3	6	551	58%	57%	0%	42%
<b>J14</b>	Teddy bears		9	3	1,230	207	98%	81%	2%	1%



Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>J15</b>	Awnings, sunblinds [marquises]	Tarpaulins and awnings	9	3	Covered under D9					
<b>J16</b>	Parasols		9	3	2,457	199	100%	98%	0%	0%
<b>J17</b>	Umbrellas		9	3	598	120	99%	93%	0%	0%
<b>J18</b>	Sails		9	3	0	268	0%	0%	0%	0%
<b>J19</b>	Tents [made of textiles]		9	3	Covered under D9					
<b>J20</b>	Mosquito nets (with anti-bacterial/fungal biocides but not treated with insecticides)		9	3	(not found)					
<b>J21</b>	Waterproof clothing		9	2	(not specified in complex custom numbers)					
<b>J22</b>	Wool clothing, moth proofed	All wool clothing	9	2	2,814	2,323	97%	63%	4%	0%
<b>J23</b>	Wool covered furniture, moth proofed		9	2	(not specified in complex custom numbers)					
<b>J24</b>	Woollen carpets and rugs	All woollen flooring materials and blankets	9	2	2,480	3,497	97%	2%	79%	0%
<b>J25</b>	Wet blue hides and other hides	All hides and skins (raw materials)	9	1	84	21,292	100%	0%	0%	0%
<b>J26</b>	Paper products with intentional addition of preservatives or film preservatives	Various impregnated, covered or otherwise treated paper qualities	7,9	3	4,717	192,197	19%	16%	0%	8%
<b>K</b>	<b>Stuffed animals [taxidermist works]</b>	<b>Stuffed animals [taxidermist works] with biocides</b>	<b>22</b>	<b>1</b>	<b>(not found)</b>					

Import to Denmark in 2011			Biocide presence		Import from, tonnes/y, 2011		% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	EU27+2	Asia	China	India	USA
<b>K1</b>	Stuffed animals [taxidermist works]		22	1	(not found)					
<b>L</b>	<b>Toilet/bathroom appliances and materials</b>	<b>Various plastic utensils and toilet paper, some of which may contain biocides, and diapers and tissues, some of which do contain biocides</b>	7	2,3	3,702	77,042	96%	80%	1%	1%
<b>L1</b>	Toilet lids, with film preservatives		7	3	756	1,478	98%	71%	0%	0%
<b>L2</b>	Bathtubs and spas, with film preservatives		7	3	7	115	100%	91%	3%	0%
<b>L3</b>	Toothbrushes, with film preservatives		7	3	477	167	100%	77%	4%	0%
<b>L4</b>	Toilet paper, with biocides		7	3	502	69,347	95%	93%	0%	1%
<b>L5</b>	Toothbrush covers, with film preservatives	Various housing and toilet articles	7	3	1,960	5,936	95%	81%	0%	2%
<b>L6</b>	Diapers and tissues with antibacterial treatment		7	2	0	0	0%	0%	0%	0%

Notes:\*1: The likelihood of finding biocides in the products vary much between product categories with each main category; see Annex 4 for details. \*2: Legend for biocide presence indicator: 1: The articles are considered always to contain biocides, 2: Biocides may present perhaps in a significant part of the products marketed, and 3: Biocides may be present, but probably in a small part of the products marketed.

Table showing the import to EU27+2 from countries outside this area.

**TABLE 9**

IMPORT OF ARTICLES THAT MAY CONTAIN BOCIDES TO EU27+2 IN 2011 . IMPORT FROM EU27+2 IS THE TOTAL IMPORT TO MEMBER STATES FROM OTHER MEMBER STATES, NORWAY AND SWITZERLAND

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>A</b>	<b>Treated wood articles</b>	<b>Impregnated construction wood and windows/doors, other wood products with varying biocide presence</b>	<b>8</b>	<b>1,2</b>	<b>11,216,175</b>	<b>10%</b>	<b>6%</b>	<b>0%</b>	<b>1%</b>
<b>A1</b>	Pressure impregnated wood for construction, marine construction, etc.	Impregnated timber	8	1	1,627,296	0%	0%	0%	0%
<b>A2</b>	Vacuum impregnated wooden doors, windows and similar	Windows and doors	8	2	6,927	59%	22%	0%	6%
<b>A3</b>					(not found)				
<b>A4</b>	Timber preserved with anti-sapstain preservatives	Timber (not included in A1, A2)	8	3	8,118,318	0%	0%	0%	1%
<b>A5</b>	Wood pallets with anti-sapstain preservatives	Wood pallets	8	2	265,051	6%	2%	0%	1%
<b>A6</b>	Garden furniture and other wood products, which may be surface coated with preservatives	Various furniture in groups including garden furniture	8	2	1,198,583	93%	59%	2%	0%
<b>B</b>	<b>Metalworking-fluids marketed with biocide contents for in-use preservation</b>	<b>All lubricants, only few of them are for metal cutting and with biocides (water-containing)</b>	<b>13</b>	<b>1,2</b>	<b>42,441</b>	<b>18%</b>	<b>4%</b>	<b>0%</b>	<b>69%</b>
<b>B1</b>	Metalworking-fluids marketed with biocide contents for in-use preservation	All lubricants	13	2	42,441	18%	4%	0%	69%
<b>C</b>	<b>Paints, sealants and glues:</b>	<b>All paints, sealants and fillers for construction; only some are with biocides</b>	<b>6</b>	<b>1,2,3</b>	<b>182,952</b>	<b>48%</b>	<b>10%</b>	<b>1%</b>	<b>26%</b>

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data) *2	Extra EU27+2	Asia	China	India	USA
<b>C1</b>	Paints, binders, water based		6	1	26,452	48%	2%	0%	26%
<b>C2</b>	Pre-made fillers, water based	Various filler types	6	3	63,624	41%	1%	0%	12%
<b>C3</b>	Sealants for outdoor and wet room use with film preservatives	All sealants	6	2	13,903	50%	4%	0%	38%
<b>C4</b>	Water based adhesives	Various adhesives	6	2	46,094	59%	31%	1%	38%
<b>C5</b>	Paints for outdoor or wet room application with surface "film" preservative	Various non-water paints	6	2	32,879	45%	7%	2%	32%
<b>D</b>	<b>Plastic products with film (surface) preservatives:</b>	<b>Primarily PVC products with plasticisers and thereby presumably biocides</b>	<b>7</b>	<b>2,3</b>	<b>1,883,006</b>	<b>91%</b>	<b>74%</b>	<b>2%</b>	<b>2%</b>
<b>D1</b>	PVC roof and pond foils; PVC bathroom curtains		7	2	25,678	76%	38%	0%	5%
<b>D2</b>	Bags of PVC coated fabric ("vinyl" sports bags and others)		7	2	636,989	98%	86%	2%	1%
<b>D3</b>	Baby nursing pads/changing stations, with film preservatives		7	2	(not found)				
<b>D4</b>	PVC (vinyl) flooring and wall covering (some types, incl. for wet rooms, busses, institutions)		7	2	190,062	94%	70%	1%	2%
<b>D5</b>	Bath mats [likely PVC]	PVC foam foil	7	2	23,763	73%	30%	24%	3%
<b>D6</b>	Shower hoses, with film preservatives		7	3	(not specified in complex custom numbers)				

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>D7</b>	Children's scissors, with film preservatives		7	3	(not specified in complex custom numbers)				
<b>D8</b>	Fitness balls, with film preservatives	All plastic balls	7	3	10,778	98%	77%	5%	1%
<b>D9</b>	PVC coated tents (primarily large tents, festival tents, party tents, etc.) and PVC tarpaulins	PVC tents and other tents of synthetic materials; all tarpaulins	7	2	128,840	98%	84%	1%	1%
<b>D10</b>	Furniture of PVC coated fabric ("vinyl" and others)	Various plastic furniture	7	3	74,188	81%	67%	0%	2%
<b>D11</b>	Other PVC/polymer products potentially treated with film preservatives	Various other products of PVC with plasticiser contents	7	2	792,707	86%	67%	1%	2%
<b>E</b>	<b>Articles that may come into contact with food:</b>	<b>Refrigerators, dishwashing machines and kitchen utensils, some of which may contain film preservatives</b>	<b>7</b>	<b>2,3</b>	<b>1,844,394</b>	<b>94%</b>	<b>47%</b>	<b>3%</b>	<b>2%</b>
<b>E1</b>	Cutting boards [kitchen use], with film preservatives		7	3	327,039	89%	67%	3%	5%
<b>E2</b>	Dish washing brushes, with film preservatives	Various house holding utensils for cleaning, etc.	7	3	0	0%	0%	0%	0%
<b>E3</b>	Dishwashing machines	All dish washing machines	7	3	105,513	100%	51%	0%	0%
<b>E4</b>	Plastic bags [kitchen use], with film preservatives		7	3	669,598	94%	31%	5%	1%
<b>E5</b>	Baby's bottles	Hygienic or pharmaceutical articles of rubber, including soothers	7	3	5,905	87%	69%	2%	8%
<b>E6</b>	Refrigerators and freezers	All refrigerators and freezers	7	2	670,961	96%	49%	0%	1%
<b>E7</b>	Knives [kitchen], with film preservatives	All kitchen and eating knives	7	3	65,379	99%	83%	3%	0%
<b>F</b>	<b>Detergents in aquatic solutions</b>	<b>Various cleaning detergents</b>	<b>6</b>	<b>2</b>	<b>226,905</b>	<b>28%</b>	<b>6%</b>	<b>5%</b>	<b>47%</b>

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>F1</b>	Detergents in aquatic solutions	Various cleaning detergents	6	2	226,905	28%	6%	5%	47%
<b>G</b>	<b>Cleaning materials:</b>	<b>Mops, sponges and vacuum cleaners, some of which could perhaps contain film preservatives</b>	<b>7</b>	<b>3</b>	<b>246,013</b>	<b>98%</b>	<b>82%</b>	<b>0%</b>	<b>1%</b>
<b>G1</b>	Mops and cleanings cloths with film preservatives		7	3	42,487	95%	72%	1%	2%
<b>G2</b>	Sponges, with film preservatives		7	3	(not found)				
<b>G3</b>	Washing balls, with film preservatives		7	3	(not found)				
<b>G4</b>	Vacuum cleaners, with film preservatives		7	3	203,525	98%	84%	0%	1%
<b>H</b>	<b>Office supplies and electronics:</b>	<b>Various office supplies with plastic surfaces, some of which could perhaps contain film preservatives</b>	<b>7</b>	<b>3</b>	<b>770,335</b>	<b>95%</b>	<b>80%</b>	<b>2%</b>	<b>2%</b>
<b>H1</b>	Pencils, with film preservatives	Various pens and pencils	7	3	39,986	91%	77%	3%	3%
<b>H2</b>	Computer keyboards, with film preservatives	Keyboards and laptops	7	3	198,163	99%	94%	0%	0%
<b>H3</b>	Computer mice, with film preservatives	Various accessories for computers	7	3	251,341	95%	79%	0%	3%
<b>H4</b>	headsets, with film preservatives		7	3	25,915	97%	81%	0%	2%
<b>H5</b>	Mobile phone covers, with film preservatives	Various mobile phone units	7	3	254,931	93%	70%	4%	2%
<b>H6</b>	Pocket calculators, with film preservatives		7	3	(not found)				

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>I</b>	<b>Other building materials/appliances</b>	<b>Polyurethane products and rubber for construction, some of which could perhaps contain film preservatives and organic insulation materials which generally contain biocides</b>	<b>7</b>	<b>2,3</b>	<b>824,096</b>	<b>70%</b>	<b>39%</b>	<b>1%</b>	<b>18%</b>
<b>I1</b>	Stone [quartz]/polymer slabs for kitchen table use		7	3	(not found)				
<b>I2</b>	Polyurethane foam [for mattresses and furniture, etc.]	Various materials of polyurethane or other cell foams	7	3	63,445	56%	20%	3%	35%
<b>I3</b>	Rubber foam insulation for plumbing		9	3	(not found)				
<b>I4</b>	Rubber foils for ponds and roofing		9	2	116,168	12%	1%	0%	82%
<b>I5</b>	Rubber sealing rings for sewer and water pipes		9	2	46,289	78%	21%	5%	12%
<b>I6</b>	Paper insulation (fibre)	Paper pulp produced from recycled paper and cardboard	9	2	17,580	3%	0%	0%	93%
<b>I7</b>	Cellulose insulation, fibre and boards	Various wood fibre materials including in boards	9	2	49,788	90%	72%	0%	1%
<b>I8</b>	Wool insulation (fibre and slabs)	Various wool raw materials	9	2	69,025	21%	14%	2%	0%
<b>I9</b>	Flax insulation (fibre and slabs)		9	3	(not found)				
<b>I10</b>	Paper-lined plaster (gypsum) boards		9	3	21,677	54%	24%	0%	20%
<b>I11</b>	Ceramic tiles with antibacterial surface	Various stone and tiles	9	3	440,125	94%	56%	1%	0%

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>J</b>	<b>Textiles</b>	<b>Various apparels, housing textiles, tarpaulins and awnings, some of which could perhaps contain film preservatives, and wool products for extra EU import may likely be moth proofed</b>	<b>9</b>	<b>2,3</b>	<b>3,965,471</b>	<b>93%</b>	<b>62%</b>	<b>6%</b>	<b>0%</b>
<b>J1</b>	Socks, antibacterial	All socks	9	3	143,633	96%	53%	1%	0%
<b>J2</b>	Sportswear, antibacterial	Sport suits and all-synthetic shirts	9	3	138,711	92%	49%	2%	0%
<b>J3</b>	Underwear, antibacterial	All underwear	9	3	145,566	93%	63%	6%	0%
<b>J4</b>	Shoe soles (inlay), antibacterial	Various footwear and soles	9	3	1,489,054	94%	70%	5%	0%
<b>J5</b>	Hats, antibacterial	All hats	9	3	10,069	95%	80%	0%	2%
<b>J6</b>	Gloves, antibacterial	All gloves	9	3	112,777	99%	64%	12%	0%
<b>J7</b>	Mattresses, mattress covers and top mattresses?		9	3	221,865	89%	66%	9%	1%
<b>J8</b>	Pillows		9	3	(not found)				
<b>J9</b>	Bedding	Various bedding items	9	3	379,074	94%	29%	10%	0%
<b>J10</b>	Towels	All towels	9	3	176,189	91%	24%	20%	0%
<b>J11</b>	Furniture, textile	Various chairs, including for vehicles	9	3	586,124	93%	79%	0%	0%
<b>J12</b>	Curtains	All curtains and similar	9	3	116,185	98%	66%	10%	0%
<b>J13</b>	Textile wall covering	Various wall covering materials	9	3	3,975	42%	25%	0%	23%
<b>J14</b>	Teddy bears		9	3	59,339	99%	88%	0%	1%



Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>J15</b>	Awnings, sunblinds [marquises]	Tarpaulins and awnings	9	3	Covered under D9				
<b>J16</b>	Parasols		9	3	81,401	99%	97%	0%	0%
<b>J17</b>	Umbrellas		9	3	66,774	98%	96%	0%	0%
<b>J18</b>	Sails		9	3	9,584	18%	0%	0%	0%
<b>J19</b>	Tents [made of textiles]		9	3	Covered under D9				
<b>J20</b>	Mosquito nets (with anti-bacterial/fungal biocides but not treated with insecticides)		9	3	(not found)				
<b>J21</b>	Waterproof clothing		9	2	(not specified in complex custom numbers)				
<b>J22</b>	Wool clothing, moth proofed	All wool clothing	9	2	162,293	85%	51%	2%	0%
<b>J23</b>	Wool covered furniture, moth proofed		9	2	(not specified in complex custom numbers)				
<b>J24</b>	Woollen carpets and rugs	All woollen flooring materials and blankets	9	2	62,859	93%	12%	54%	1%
<b>J25</b>	Wet blue hides and other hides	All hides and skins (raw materials)	9	1	113,202	9%	0%	1%	26%
<b>J26</b>	Paper products with intentional addition of preservatives or film preservatives	Various impregnated, covered or otherwise treated paper qualities	7.9	3	311,855	24%	10%	0%	47%

Import in 2011 to EU27			Biocide presence		Import from, tonnes/y, 2011	% of extra EU27+2 import			
Sheet name	Article type	Import categories (summaries), if different from article type*1	PT	Indicator (import data)*2	Extra EU27+2	Asia	China	India	USA
<b>K</b>	<b>Stuffed animals [taxidermist works]</b>	<b>Stuffed animals [taxidermist works] with biocides</b>	<b>22</b>	<b>1</b>					
<b>K1</b>	Stuffed animals [taxidermist works]		22	1	(not found)				
<b>L</b>	<b>Toilet/bathroom appliances and materials</b>	<b>Various plastic utensils and toilet paper, some of which may contain biocides, and diapers and tissues, some of which do contain biocides</b>	<b>7</b>	<b>2,3</b>	<b>257,623</b>	<b>74%</b>	<b>51%</b>	<b>2%</b>	<b>5%</b>
<b>L1</b>	Toilet lids, with film preservatives		7	3	41,840	93%	79%	0%	1%
<b>L2</b>	Bathtubs and spas, with film preservatives		7	3	4,248	99%	96%	2%	0%
<b>L3</b>	Toothbrushes, with film preservatives		7	3	14,303	95%	71%	11%	4%
<b>L4</b>	Toilet paper, with biocides		9	3	87,183	41%	8%	1%	8%
<b>L5</b>	Toothbrush covers, with film preservatives	Various housing and toilet articles	7	3	110,050	89%	71%	2%	3%
<b>L6</b>	Diapers with antibacterial treatment		?	2	0	0%	0%	0%	0%

Notes:\*1: The likelihood of finding biocides in the products vary much between product categories with each main category; see Annex 3 for details. \*2: Legend for biocide presence indicator: 1: The articles are considered always to contain biocides, 2: Biocides may present perhaps in a significant part of the products marketed, and 3: Biocides may be present, but probably in a small part of the products marketed.

**Annex 5: Commodity codes use for the data (CN8)**

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
<b>A</b>	<b>Treated wood articles</b>			
<b>A1</b>	Impregnated wood for construction, marine construction, etc.	8	Railway or tramway sleepers "cross-ties" of wood, impregnated	44069000
			Wood in the rough, treated with paint, stains, creosote or other preservatives (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.)	44031000
			Spruce of the species "picea abies karst." or silver fir "abies alba mill.", in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44032019
			Pine of the species "pinus sylvestris l." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44032039
			Coniferous wood in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives; and spruce of the species "picea abies karst.", silver fir "abies alba mill." and pine of the species "pinus sylvestris l.")	44032099
<b>A2</b>	Vacuum impregnated wooden doors, windows and similar	8	Windows and french windows and their frames, of okoumé, obeche, sapelli, sipo, acajou d'afrique, makoré, iroko, tiama, mansonia, ilomba, dibétou, limba, azobé, dark red meranti, light red meranti, meranti bakau, white lauan, white meranti, white seraya, yellow meranti, alan, keruing, ramin, kapur, teak, jongkong, merbau, jelutong, kempas, virola, mahogany "swietenia spp.", imbuia, balsa, palissandre de rio, palissandre de para and palissandre de rose	44181010
			Windows and french windows and their frames, of coniferous wood	44181050
			Windows and french windows and their frames, of wood (excl. Okoumé, obeche, sapelli, sipo, acajou d'afrique, makoré, iroko, tiama, mansonia, ilomba, dibétou, limba, azobé, dark red meranti, light red meranti, meranti bakau, white lauan, white meranti, white seraya, yellow meranti, alan, keruing, ramin, kapur, teak, jongkong, merbau, jelutong, kempas, virola, mahogany "swietenia spp.", imbuia, balsa, palissandre de rio, palissandre de para and palissandre de rose, and coniferous wood)	44181090

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
A3	Timber preserved with anti-sapstain preservatives	8	Sawlogs of spruce of the species "picea abies karst." or silver fir "abies alba mill.", whether or not stripped of bark or sapwood, or roughly squared	44032011
			Spruce of the species "picea abies karst." or silver fir "abies alba mill.", in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44032019
			Sawlogs of pine of the species "pinus sylvestris l.", whether or not stripped of bark or sapwood, or roughly squared	44032031
			Pine of the species "pinus sylvestris l." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44032039
			Dark red meranti, light red meranti and meranti bakau wood in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44034100
			Sapelli, acajou d'afrique and iroko in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44034910
			Abura, afrormosia, ako, alan, andiroba, aningré, avodiré, azobé, balau, balsa, bossé clair, bossé foncé, cativo, cedro, dabema, dibétou, doussié, framiré, freijo, fromager, fuma, geronggang, ilomba, imbuia, ipé, jaboty, jelutong, jequitiba, jongsong, kapur, kempas, keruing, kosipo, kotibé, koto, limba, louro, maãSaranduba, mahogany, makoré, mandioqueira, mansonina, mengkulang, merawan, merbau, merpauh, mersawa, moabi, niangon, nyatoh, obeche, onzabili, orey, ovengkol, ozigo, padauk, paldao, palissandre de guatemala, palissandre de rio, palissandre de para, palissandre de rose, pau amarelo, pau marfim, pulai, punah, quaruba, ramin, saqui-saqui, sepetir, sucupira, suren, tauari, teak, tiama, tola, virola, white lauan, white meranti, white seraya and yellow meranti, in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44034995
			Sawlogs of oak "quercus spp.", whether or not stripped of bark or sapwood, or roughly squared	44039110
			Oak "quercus spp." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44039190

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Sawlogs of beech "fagus spp.", whether or not stripped of bark or sapwood, or roughly squared	44039210
			Beech "fagus spp." in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood in the form of railway sleepers; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44039290
			Poplar in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44039910
			Eucalyptus wood in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44039930
			Sawlogs of birch, whether or not stripped of bark or sapwood, or roughly squared	44039951
			Birch, in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Sawlogs; rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives)	44039959
			Wood in the rough, whether or not stripped of bark or sapwood, or roughly squared (excl. Rough-cut wood for walking sticks, umbrellas, tool shafts and the like; wood cut into boards or beams, etc.; wood treated with paint, stains, creosote or other preservatives, tropical wood of subheading note 1 to this chapter and coniferous wood, oak, beech, poplar, eucalyptus and birch wood)	44039995
<b>A4</b>	Wood pallets with anti-sapstain preservatives	8	Cases, boxes, crates, drums and similar packagings, of wood	44151010
			Cable drums of wood	44151090
			Pallets and pallet collars, of wood	44152020
			Box pallets and other load boards, of wood (excl. Containers specially designed and equipped for one or more modes of transport; flat pallets and pallet collars)	44152090

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
A5	Garden furniture and other wood products, which may be surface coated with preservatives	8	Seats of bamboo or rattan	94015100
			Seats of cane, osier or similar materials (excl. Of bamboo or rattan)	94015900
			Upholstered seats, with wooden frames (excl. Convertible into beds)	94016100
			Seats, with wooden frames (excl. Upholstered)	94016900
			Wooden furniture (excl. For offices or shops, kitchens, dining rooms, living rooms and bedrooms, and seats)	94036090
			Furniture of bamboo or rattan (excl. Seats and medical, surgical, dental or veterinary furniture)	94038100
			Furniture of other materials, including cane, osier or similar materials (excl. Of bamboo, rattan, metal, wood and plastics, and seats and medical, surgical, dental or veterinary furniture)	94038900
<b>B</b>	<b>Metalworking-fluids marketed with biocide contents for in-use preservation</b>			
B1	Metalworking-fluids marketed with biocide contents for in-use preservation	13	Textile lubricant preparations and preparations of a kind used for the oil or grease treatment of leather, furskins or other material containing petroleum oil or bituminous mineral oil (excl. Preparations containing, as basic constituents, $\geq 70\%$ petroleum oil or bituminous mineral oil by weight)	34031100
			Lubricant preparations, incl. Cutting-oil preparations, bolt or nut release preparations, anti-rust or anti-corrosion preparations and mould-release preparations, based on lubricants and containing, as non-basic constituents, $\geq 70\%$ petroleum oil or bituminous mineral oil by weight (excl. Preparations for the treatment of textiles, leather, furskins and other materials)	34031910
			Lubricating preparations, incl. Cutting-oil preparations, bolt or nut release preparations, anti-rust or anti-corrosion preparations and mould-release preparations, based on lubricants, containing, by weight, $< 70\%$ of petroleum oil or oil obtained from bituminous minerals (excl. Preparations for the treatment of textile materials, leather, fur skins or other materials)	34031990
			Textile lubricant preparations and preparations of a kind used for the oil or grease treatment of leather, furskins or other material not containing petroleum oil or bituminous mineral oil	34039100

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Lubricant preparations, incl. Cutting-oil preparations, bolt or nut release preparations, anti-rust or anti-corrosion preparations and mould-release preparations, based on lubricants but not containing petroleum oil or bituminous mineral oil (excl. Preparations for the treatment of textiles, leather, furskins and other materials)	34039900
<b>C</b>	<b>Paints, sealants and glues</b>			
<b>C1</b>	Paints, binders, water based	6	Paints and varnishes, incl. Enamels and lacquers, based on acrylic or vinyl polymers, dispersed or dissolved in an aqueous medium	32091000
			Paints and varnishes, incl. Enamels and lacquers, based on synthetic or chemically modified natural polymers, dispersed or dissolved in an aqueous medium (excl. Those based on acrylic or vinyl polymers)	32099000
<b>C2</b>	Pre-made fillers, water based	6	Painter's fillings	32141090
			Non-refractory surfacing preparations for facades, inside walls, floors, ceilings and the like	32149000
<b>C3</b>	Sealants for outdoor and wetroom use with film presevatives	6	Glaziers' putty, grafting putty, resin cements, caulking compounds and other mastics	32141010
<b>C4</b>	Water based adhesives	6	Glues containing < 25% starches, dextrans or other modified starches by weight (excl. Those put up for retail sale and weighing net <= 1 kg)	35052010
			Glues containing >= 25% but < 55% starches, dextrans or other modified starches by weight (excl. Those put up for retail sale and weighing net <= 1 kg)	35052030
			Glues containing >= 55% but < 80% starches, dextrans or other modified starches by weight (excl. Those put up for retail sale and weighing net <= 1 kg)	35052050
			Glues containing >= 80% starches, dextrans or other modified starches by weight (excl. Those put up for retail sale and weighing net <= 1 kg)	35052090
			Products suitable for use as glues or adhesives put up for retail sale as glues or adhesives, with a net weight of <= 1 kg	35061000
			Adhesives based on polymers of heading 3901 to 3913 or on rubber (excl. Products suitable for use as glues or adhesives put up for retail sale as glues or adhesives, with a net weight of <= 1 kg)	35069100
			Glues, prepared, and other prepared adhesives, n.e.s.	35069900

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
C5	Paints for outdoor or wetroom application with surface "film" preservative	6	Polyester-based solutions in volatile organic solvents, containing > 50% solvent by weight	32081010
			Paints and varnishes, incl. Enamels and lacquers, based on polyesters, dispersed or dissolved in a non-aqueous medium	32081090
			Solutions based on acrylic or vinyl polymers in volatile organic solvents, containing > 50% solvent by weight	32082010
			Paints and varnishes, incl. Enamels and lacquers, based on acrylic or vinyl polymers, dispersed or dissolved in a non-aqueous medium	32082090
			Polyurethane of 2,2'-"tert-butylimino"diethanol and 4,4'-methylenedicyclohexyl diisocyanate, in the form of a solution in n,n-dimethylacetamide, containing by weight >= 48%, but < 50% of polymer	32089011
			Copolymer of p-cresol and divinylbenzene, in the form of a solution in n,n-dimethylacetamide, containing by weight >= 48%, but < 50% of polymer	32089013
			Solutions of products of headings 3901 to 3913 in volatile organic solvents, containing > 50% solvent by weight (excl. Polyesters, acrylic or vinyl polymers and collodion, and polyurethane of 2,2'-"tert-butylimino"diethanol and 4,4'-methylenedicyclohexyl diisocyanate and copolymer of p-cresol and divinylbenzene, both in the form of a solution in n,n-dimethylacetamide, containing by weight >= 48% of polymer)	32089019
			Paints and varnishes, incl. Enamels and lacquers, based on synthetic polymers, dispersed or dissolved in a non-aqueous medium (excl. Those based on polyesters and acrylic or vinyl polymers)	32089091
			Paints and varnishes, incl. Enamels and lacquers, based on chemically modified natural polymers, dispersed or dissolved in a non-aqueous medium	32089099
			Oil paints and varnishes, incl. Enamels and lacquers	32100010
D	Plastic products with film (surface) preservatives:	7		
D1	PVC roof and pond foils; PVC bathroom curtains	7	Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight >= 6% of plasticisers, of a thickness of <= 1 mm, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. Self-adhesive products, and floor, wall and ceiling coverings of heading 3918)	39204310



Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Plates, sheets, film, foil and strip, of non-cellular polymers of vinyl chloride, containing by weight $\geq$ 6% of plasticisers, of a thickness of $>$ 1 mm, not reinforced, laminated, supported or similarly combined with other materials, without backing, unworked or merely surface-worked or merely cut into squares or rectangles (excl. Self-adhesive products, and floor, wall and ceiling coverings of heading 3918)	39204390
<b>D2</b>	Bags of PVC coated fabric ("vinyl" sports bags and others)	7	Sacks and bags, incl. Cones, of poly"vinyl chloride"	39232910
			Executive-cases, briefcases, portfolios, school satchels and similar containers with outer surface of leather, composition leather or patent leather	42021110
			Executive-cases, briefcases, school satchels and similar containers, with outer surface of plastic sheeting	42021211
			Trunks, suitcases, vanity cases, executive-cases, briefcases, school satchels and similar containers, with outer surface of moulded plastic material	42021250
			Executive-cases, briefcases, school satchels and similar containers, with outer surface of plastic, incl. Vulcanised fibre, or of textile materials (excl. Those with an outer surface of plastic sheeting or moulded plastic material)	42021291
			Trunks, suitcases, vanity cases, executive-cases, briefcases, school satchels and similar containers (excl. With outer surface of leather, composition leather, patent leather, plastics, textile materials or aluminium)	42021990
			Handbags, whether or not with shoulder straps, incl. Those without handles, with outer surface of plastic sheeting	42022210
			Handbags, whether or not with shoulder straps, incl. Those without handles, with outer surface of textile materials	42022290
			Handbags, whether or not with shoulder strap, incl. Those without handle, with outer surface of vulcanised fibre or paper-board, or wholly or mainly covered with such materials or with paper	42022900
			Travelling-bags, toilet bags, rucksacks and sports bags, with outer surface of plastic sheeting	42029211
			Musical instrument cases, with an outer surface of plastic sheeting	42029215
			Shopping bags, map cases, tool bags, make-up boxes, cutlery boxes, cases for binoculars, cameras, video cameras or arms and similar containers, with an outer surface of plastic sheeting (excl. Trunks, briefcases, school satchels and similar containers, handbags, articles carried in the pocket or handbag, travel bags, toilet and sports bags, rucksacks and musical instrument cases)	42029219

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Travelling-bags, toilet bags, rucksacks and sports bags, with outer surface of textile materials	42029291
			Insulated food or beverage bags, shopping bags, map-cases, tool bags, jewellery boxes, cutlery cases, binocular cases, camera cases, musical instrument cases, gun cases, holsters and similar containers, with outer surface of textile materials (excl. Trunks, briefcases, school satchels and similar containers, articles of a kind normally carried in the pocket or in the handbag, travelling-bags, toilet bags, sports bags and rucksacks)	42029298
			Travelling-bags, shopping or tool bags, jewellery boxes, cutlery cases and similar, with outer surface of vulcanised fibre or paperboard; cases for binoculars, cameras, musical instruments, guns, holsters and similar containers with outer surface of materials (not leather, plastic sheeting or textile materials) (excl. Trunks, briefcases, school satchels and similar; handbags; articles normally carried in pocket or handbag)	42029900
<b>D3</b>	Baby nursing pads/changing stations, with film preservatives	7		(not found)
<b>D4</b>	PVC (vinyl) flooring and wall covering (some types, incl. for wetrooms, busses, institutions)	7	Floor coverings, whether or not self-adhesive, in rolls or in the form of tiles, and wall or ceiling coverings "in rolls with a width of $\geq$ 45 cm, consisting of a layer of plastics fixed permanently on a backing of any material other than paper, the face side of which is grained, embossed, coloured, design-printed or otherwise decorated", on a support impregnated, coated or covered with poly"vinyl chloride"	39181010
			Floor coverings of polymers of vinyl chloride, whether or not self-adhesive, in rolls or in the form of tiles (excl. Those on a backing coated, impregnated or covered with poly"vinyl chloride")	39181090
<b>D5</b>	Bath mats [likely PVC]	7	Plates, sheets, film, foil and strip, of cellular polymers of vinyl chloride, unworked or merely surface-worked or merely cut into squares or rectangles (excl. Self-adhesive products, floor, wall and ceiling coverings of heading 3918)	39211200
<b>D6</b>	Shower hoses, with film preservatives	7		(not specified in complex custom numbers)
<b>D7</b>	Children's scissors, with film preservatives	7		(not specified in complex custom numbers)
<b>D8</b>	Fitness balls, with film preservatives	7	Inflatable balls (excl. Of leather)	95066990

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Balls (excl. Inflatable, golf, table-tennis, tennis, cricket and polo balls)	95066290
<b>D9</b>	PVC coated tents (primarily large tents, festival tents, party tents, etc.) and PVC tarpaulins	7	Textile fabrics impregnated with poly"vinyl chloride" (excl. Wallcoverings of textile materials impregnated with poly"vinyl chloride")	59031010
			Textile fabrics coated, covered or laminated with poly"vinyl chloride" (excl. Wallcoverings of textile materials covered with poly"vinyl chloride"; floor coverings consisting of a textile backing and a top layer or covering of poly"vinyl chloride")	59031090
			Tarpaulins, awnings and sunblinds of synthetic fibres (excl. Flat covers of light fabrics made up as tarpaulins)	63061200
			Tarpaulins, awnings and sunblinds of textile materials (excl. Cotton or synthetic fibres and flat covers of light fabrics made up as tarpaulins)	63061900
			Tents of synthetic fibres (excl. Umbrella and play tents)	63062200
			Tents of textile materials (excl. Cotton or synthetic fibres and fly sheets)	63062900
<b>D10</b>	Furniture of PVC coated fabric ("vinyl" and others)	7	Furniture of plastics (excl. Medical, dental, surgical or veterinary, and seats)	94037000
<b>D11</b>	Other PVC/polymer products potentially treated with film preservatives		Pneumatic mattresses of textile materials	63064000
			Camping goods of textile materials (excl. Tents, awnings and sunblinds, sails, pneumatic mattresses, rucksacks, knapsacks and similar receptacles, filled sleeping bags, mattresses and cushions)	63069000
			Waterproof footwear covering neither the ankle nor the knee, with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Incorporating a protective metal toecap, orthopaedic footwear, skating boots with ice or roller skates attached, and toy footwear)	64019900
			Footwear with outer soles and uppers of rubber or plastics, with upper straps or thongs assembled to the sole by means of plugs (excl. Toy footwear)	64022000

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Footwear with uppers of plastic and outer soles of rubber or plastics, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of > 3 cm (excl. With upper straps or thongs assembled to the sole by means of plugs)	64029931
			Footwear with uppers of plastic and outer soles of rubber or plastics, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm (excl. With upper straps or thongs assembled to the sole by means of plugs)	64029939
			Coaxial cable and other coaxial electric conductors, insulated	85442000
			Electric conductors of a kind used for telecommunications, for a voltage <= 1.000 v, insulated, fitted with connectors, n.e.s.	85444210
			Electric conductors, for a voltage <= 1.000 v, insulated, fitted with connectors, n.e.s. (other than of a kind used for telecommunications)	85444290
			Conductors, electric, for a voltage <= 80 v, insulated, not fitted with connectors, of a kind used for telecommunications, n.e.s.	85444920
			Conductors, electric, for a voltage <= 80 v, insulated, not fitted with connectors, n.e.s. (excl. Winding wire, coaxial conductors, wiring sets for vehicles, aircraft or ships, and wire and cables with individual conductor wires of a diameter > 0,51 mm)	85444993
			Electric conductors for a voltage > 80 v but < 1.000 v, insulated, not fitted with connectors, n.e.s. (excl. Winding wire, coaxial conductors, wiring sets for vehicles, aircraft or ships, and wire and cables with individual conductor wires of a diameter > 0,51 mm)	85444995
			Articles and equipment for sport and outdoor games n.e.s; swimming and paddling pools	95069990
<b>E</b>	<b>Articles that may come into contact with food:</b>	<b>7</b>		
<b>E1</b>	Cutting boards, food boxes and salad bowls [kitchen use], with film preservatives	7	Household articles and toilet articles, of plastics (excl. Tableware, kitchenware, baths, shower-baths, washbasins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware)	39249000
7		Tableware and kitchenware, of plastics	39241000	
7		Table, kitchen or other household articles, and parts thereof, of iron other than cast iron or steel other than stainless (excl. Enamelled articles; cans, boxes and similar containers of heading 7310; waste baskets; shovels and other articles of the nature of a work implement; cutlery, spoons, ladles etc. Of heading 8211 to 8215; ornamental articles; sanitary ware)	73239900	

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
E2	Dish washing brushes, with film preservatives	7	Table, kitchen or other household articles, parts thereof, of aluminium, cast (excl. Cans, boxes and similar containers of heading 7612, articles of the nature of a work implement, spoons, ladles and other articles of headings 8211 to 8215, ornamental articles, fittings and sanitary ware)	76151010
			Table, kitchen or other household articles, parts thereof, of aluminium, not cast, including pot scourers and scouring or polishing pads, gloves and the like, of aluminium (excl. Cans, boxes and similar containers of heading 7612, articles of the nature of a work implement, spoons, ladles, forks and other articles of headings 8211 to 8215, ornamental articles, fittings and sanitary ware)	76151090
E3	Dishwashing machines	7	Dishwashing machines of the household type	84221100
			Dishwashing machines (excl. Those of the household type)	84221900
			Parts of dishwashing machines, n.e.s.	84229010
E4	Plastic bags [kitchen use], with film preservatives	7	Sacks and bags, incl. Cones, of polymers of ethylene	39232100
			Sacks and bags, incl. Cones, of plastics (excl. Those of poly"vinyl chloride" and polymers of ethylene)	39232990
E5	Baby's bottles	7	Hygienic or pharmaceutical articles, incl. Teats, of vulcanised rubber (excl. Hard rubber), with or without fittings of hard rubber, n.e.s. (excl. Sheath contraceptives and articles of apparel and clothing accessories, incl. Gloves, for all purposes)	40149000
E6	Refrigerators and freezers	7	Combined refrigerator-freezers, of a capacity > 340 l, fitted with separate external doors	84181020
			Combined refrigerator-freezers, of a capacity <= 340 l, fitted with separate external doors	84181080
			Household refrigerators, compression-type, of a capacity > 340 l	84182110
			Household refrigerators, compression-type, table model	84182151
			Household refrigerators, compression-type, building-in type	84182159
			Household refrigerators compression-type, of a capacity <= 250 l (excl. Table models and building-in types)	84182191
			Household refrigerators, compression-type, of a capacity > 250 l but <= 340 l (excl. Table models and building-in types)	84182199
			Household refrigerators, non-electrical, absorption-type	84182900
			Freezers of the chest type, of a capacity <= 400 l	84183020

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Freezers of the chest type, of a capacity > 400 l but <= 800 l	84183080
			Freezers of the upright type, of a capacity <= 250 l	84184020
			Freezers of the upright type, of a capacity > 250 l but <= 900 l	84184080
			Refrigerated show-cases and counters, with a refrigerating unit or evaporator, for frozen food storage	84185011
			Refrigerated show-cases and counters, with a refrigerating unit or evaporator, for non-frozen food storage	84185019
			Refrigerating furniture with a refrigerating unit or evaporator (excl. Combined refrigerator-freezers, with separate external doors, household refrigerators, refrigerated show-cases and counters)	84185090
<b>E7</b>	Knives [kitchen], with film preservatives	7	Sets consisting of one or more knives of heading 8211 and at least an equal number of spoons, forks or other articles of heading 8215, of stainless steel, containing no articles plated with precious metal	82152010
			Sets consisting of one or more knives of heading 8211 and at least an equal number of spoons, forks or other articles of heading 8215, of base metals other than stainless steel, containing no articles plated with precious metal	82152090
			Spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter-knives, sugar tongs and similar kitchen or tableware of base metal, plated with precious metal (excl. Sets of articles such as lobster cutters and poultry shears)	82159100
			Spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter-knives, sugar tongs and similar kitchen or tableware of stainless steel, not plated with precious metal (excl. Sets of articles such as lobster cutters and poultry shears)	82159910
			Spoons, forks, ladles, skimmers, cake-servers, fish-knives, butter-knives, sugar tongs and similar kitchen or tableware of base metals other than stainless steel, not plated with precious metal (excl. Sets of articles such as lobster cutters and poultry shears)	82159990
<b>F</b>	<b>Detergents in aquatic solutions</b>			
<b>F1</b>	Detergents in aquatic solutions	6	Aqueous solution containing by weight >= 30% but <= 50% of disodium alkyl[oxydi"benzenesulphonate"] (excl. Soaps)	34021110
			Anionic organic surface-active substances, whether or not put up for retail sale (excl. Soaps and aqueous solution containing by weight >= 30% but <= 50% of disodium alkyl[oxydi"benzenesulphonate"])	34021190
			Cationic organic surface-active substances, whether or not put up for retail sale (excl. Soap)	34021200
			Non-ionic organic surface-active substances, whether or not put up for retail sale (excl. Soap)	34021300

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Organic surface-active substances, whether or not put up for retail sale (excl. Anionic, cationic or non-ionic agents and soap)	34021900
			Surface-active preparations put up for retail sale (excl. Organic surface-active preparations in the form of bars, cakes, moulded pieces or shapes, and organic surface-active products and preparations for washing the skin in the form of liquid or cream)	34022020
			Washing preparations, incl. Auxiliary washing preparations and cleaning preparations put up for retail sale (excl. Organic surface-active substances, soap and surface-active preparations, and products and preparations for washing the skin in the form of liquid or cream)	34022090
			Surface-active preparations (excl. Those put up for retail sale, organic surface-active preparations in the form of bars, cakes, moulded pieces or shapes, and products and preparations for washing the skin in the form of liquid or cream)	34029010
			Washing preparations, incl. Auxiliary washing preparations and cleaning preparations (excl. Those put up for retail sale, organic surface-active substances, soap and surface-active preparations and products and preparations for washing the skin in the form of liquid or cream)	34029090
<b>G</b>	<b>Cleaning materials:</b>			
<b>G1</b>	Mops and cleanings cloths with film preservatives		Floorcloths, dishcloths, dusters and similar cleaning cloths, knitted or crocheted	63071010
			Floorcloths, dishcloths, dusters and similar cleaning cloths, of nonwovens	63071030
			Floorcloths, dishcloths, dusters and similar cleaning cloths, of all types of textile materials (excl. Knitted or crocheted and nonwovens)	63071090
<b>G2</b>	Sponges, with film preservatives	7		(Not found)
<b>G3</b>	Washing balls, with film preservatives	7		(Not found)
<b>G4</b>	Vacuum cleaners, with film preservatives	7	Vacuum cleaners, incl. Dry cleaners and wet vacuum cleaners, with self-contained electric motor, power <= 1 500 w and having a dust bag or other receptacle capacity <= 20 l	85081100
			Vacuum cleaners, incl. Dry cleaners and wet vacuum cleaners, with self-contained electric motor ( excl. Of a power <= 1 500 w and having a dust bag or other receptacle capacity <= 20 l)	85081900
			Vacuum cleaners, incl. Dry cleaners and wet vacuum cleaners (excl. With self-contained electric motor)	85086000

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Parts of vacuum cleaners, dry cleaners and wet vacuum cleaners, n.e.s.	85087000
<b>H</b>	<b>Office supplies and electronics:</b>			
<b>H1</b>	Pencils, with film preservatives	7	Ball-point pens with liquid ink	96081010
			Ball-point pens with replaceable refill (excl. With liquid ink)	96081092
			Ball-point pens (excl. With replaceable refill, and with liquid ink)	96081099
			Propelling or sliding pencils	96084000
			Sets of articles from two or more of the following: ball-point pens, felt or fibre-tipped pens and markers, fountain pens and propelling pencils	96085000
			Pen nibs and nib points	96089100
			Parts of ball-point pens, felt-tipped and other porous-tipped pens and markers, fountain pens and propelling pencils n.e.s, pencil-holders, pen-holders and the like, and duplicating stylos	96089900
<b>H2</b>	Computer keyboards, with film preservatives	7	Data-processing machines, automatic, digital, portable, weighing <= 10 kg, consisting of at least a central processing unit, a keyboard and a display (excl. Peripheral units)	84716060
			Keyboards for automatic data-processing machines, whether or not containing storage units in the same housing	84713000
<b>H3</b>	Computer mice, with film preservatives	7	Electronic assemblies of automatic data-processing machines or for other machines of heading 8471, n.e.s.	84733020
			Parts and accessories of automatic data-processing machines or for other machines of heading 8471, n.e.s. (excl. Electronic assemblies)	84733080
<b>H4</b>	headsets, with film preservatives	7	Headphones and earphones, whether or not combined with microphone, and sets consisting of a microphone and one or more loudspeakers (excl. Line telephone handsets, telephone sets, hearing aids and helmets with built-in headphones, whether or not incorporating a microphone)	85183095
<b>H5</b>	Mobile phone covers, with film preservatives	7	Line telephone sets with cordless handsets	85171100
			Telephones for cellular networks "mobile telephones" or for other wireless networks	85171200



Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Machines for the reception, conversion and transmission or regeneration of voice, images or other data, incl. Switching and routing apparatus (excl. Telephone sets, telephones for cellular networks or for other wireless networks)	85176200
			Entry-phone systems	85176920
			Portable receivers for calling, alerting or paging	85176931
			Reception apparatus for radio-telephony or radio-telegraphy (excl. Portable receivers for calling, alerting or paging)	85176939
			Apparatus for the transmission or reception of voice, images or other data, incl. Apparatus for communication in a wired or wireless network [such as a local or wide area network] (excl. Telephone sets, telephones for cellular networks or for other wireless networks, base stations, apparatus for the reception, conversion and transmission or regeneration of voice, images or other data, videophones, entry-phone systems, reception apparatus for radio-telephony or radio-telegraphy and transmission or reception apparatus of heading 8443, 8525, 8527 or 8528)	85176990
			Parts of telephone sets, telephones for cellular networks or for other wireless networks and of other apparatus for the transmission or reception of voice, images or other data, n.e.s. (excl. Aerials and aerial reflectors of all kinds and parts suitable for use with aerials or aerial reflectors)	85177090
<b>H6</b>	Pocket calculators, with film preservatives	7		(not found)
<b>I</b>	<b>Other building materials/appliances</b>			
<b>I1</b>	Stone [quartz]/polymer slabs for kitchen table use	7		(Not found)
<b>I2</b>	Polyurethane foam [for mattresses and furniture, etc.]	7	Polyurethane of 2,2'-"tert-butylimino"diethanol and 4,4'-methylenedicyclohexyl diisocyanate, in the form of a solution in n,n-dimethylacetamide, containing by weight $\geq$ 48%, but $<$ 50% of polymer	32089011
			Polyurethane of 2,2'-"tert-butylimino"diethanol and 4,4'-methylenedicyclohexyl diisocyanate, in the form of a solution in n,n-dimethylacetamide, containing by weight $\geq$ 50% of polymer	39095010
			Polyurethanes in primary forms (excl. Polyurethane of 2,2'-"tert-butylimino"diethanol and 4,4'-methylenedicyclohexyl diisocyanate, in the form of a solution in n,n-dimethylacetamide)	39095090

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Plates, sheets, film, foil and strip, of flexible cellular polyurethane, unworked or not further worked than surface-worked or merely cut into squares or rectangles (excl. Such self-adhesive products, and floor, wall and ceiling coverings of heading 3918)	39211310
			Plates, sheets, film, foil and strip, of rigid cellular polyurethane, unworked or not further worked than surface-worked or merely cut into squares or rectangles (excl. Such self-adhesive products, and floor, wall and ceiling coverings of heading 3918)	39211390
			Plates, sheets and strip of cellular rubber	40081100
			Rods and profile shapes, of cellular rubber	40081900
			Articles of cellular rubber, n.e.s.	40161000
<b>I3</b>	Rubber foam insulation for plumbing	9		(Not found)
<b>I4</b>	Rubber foils for ponds and roofing	9	Ethylene-propylene diene rubber "epdm", non-conjugated, in primary forms or in plates, sheets or strip	40027000
			Synthetic rubber and factice derived from oils, in primary forms or in plates, sheets or strip (excl. Styrene-butadiene rubber "sbr", carboxylated styrene-butadiene rubber "xsbr", butadiene rubber "br", isobutylene isoprene rubber "iir", halo-isobutene-isoprene rubber "ciir" or "biir", chloroprene rubber "cr", acrylonitrile-butadiene rubber "nbr", isoprene rubber "ir" and non-conjugated ethylene-propylene diene rubber "epdm")	40029100
<b>I5</b>	Rubber sealing rings for sewer and water pipes	9	Gaskets, washers and other seals, of vulcanised rubber (excl. Hard rubber and those of cellular rubber)	40169300
<b>I6</b>	Paper insulation (fibre)	9	Pulps of fibres derived from recovered "waste and scrap" paper or paperboard	47062000
<b>I7</b>	Cellulose insulation, fibre and boards	9	Wood wool; wood flour "wood powder able to pass through a fine", 0,63 mm mesh, sieve with a residue of <= 8% by weight	44050000
			Fibreboard of wood or other ligneous materials, whether or not agglomerated with resins or other organic bonding agents, of a density of > 0,5 g to 0,8 g/cm <sup>3</sup> , not mechanically worked or surface-covered (excl. Medium density fibreboard "mdf"; particle board, whether or not bonded with one or more sheets of fibreboard; laminated wood with a layer of plywood; cellular wood panels of which both sides are fibreboard; paperboard; identifiable furniture components)	44119310

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Fibreboard of wood or other ligneous materials, whether or not agglomerated with resins or organic bonding agents, of a density of > 0,5 g to 0,8 g/cm <sup>3</sup> , mechanically worked or surface-covered (excl. Medium density fibreboard "mdf"; particle board, whether or not bonded with one or more sheets of fibreboard; laminated wood with a layer of plywood; cellular wood panels of which both sides are fibreboard; paperboard; identifiable furniture components)	44119390
			Fibreboard of wood or other ligneous materials, whether or not agglomerated with resins or other organic bonding agents, of a density of <= 0,5 g/cm <sup>3</sup> (excl. Mechanically worked or surface-covered; medium density fibreboard "mdf"; particle board, whether or not bonded with one or more sheets of fibreboard; laminated wood with a layer of plywood; cellular wood panels of which both sides are fibreboard; paperboard; identifiable furniture components)	44119410
			Fibreboard of wood or other ligneous materials, whether or not agglomerated with resins or other organic bonding agents, with a density of <= 0,5 g/cm <sup>3</sup> , mechanically worked or surface-covered (excl. Medium density fibreboard "mdf"; particle board, whether or not bonded with one or more sheets of fibreboard; laminated wood with a layer of plywood; cellular wood panels of which both sides are fibreboard; paperboard; identifiable furniture components)	44119490
			Articles of fibreboard, n.e.s.	44219091
			Mechanical pulp of fibrous cellulosic material (excl. That of wood and cotton linters)	47069100
<b>I8</b>	Wool insulation (fibre and slabs)	9	Shorn wool, degreased, non-carbonised, neither carded nor combed	51012100
			Degreased wool, non-carbonised, neither carded nor combed (excl. Shorn wool)	51012900
			Carbonised wool, neither carded nor combed	51013000
			Noils of wool or of fine animal hair, non-carbonised (excl. Garnetted stock)	51031010
			Noils of wool or of fine animal hair, carbonised (excl. Garnetted stock)	51031090
<b>I9</b>	Flax insulation (fibre and slabs)	9		(Not found)
<b>I10</b>	Paper-lined plaster (gypsum) boards	9	Boards, sheets, panels, tiles and similar articles, of plaster or compositions based on plaster, faced or reinforced with paper or paperboard only (excl. Ornamented and with plaster agglomerated articles for heat-insulation, sound-insulation or sound absorption)	68091100
			Boards, sheets, panels, tiles and similar articles, of plaster or compositions based on plaster (excl. Ornamented, faced or reinforced with paper or paperboard only, and with plaster agglomerated articles for heat-insulation, sound-insulation or sound absorption)	68091900

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
<b>I11</b>	Ceramic tiles with anti-bacterial surface	7	Unglazed flags and paving, hearth or wall tiles of stoneware; unglazed mosaic cubes and the like of stoneware, whether or not on a backing (excl. Tiles specially adapted as table mats, ornamental articles, tiles specifically manufactured for stoves, tiles and cubes and the like the largest surface area of which is capable of being enclosed in a square of side of < 7 cm)	69079020
			Unglazed ceramic flags and paving, hearth or wall tiles; unglazed ceramic mosaic cubes and the like, whether or not on a backing (excl. Of siliceous fossil meals or similar siliceous earths, refractory ceramic goods, articles of stoneware, tiles specially adapted as table mats, ornamental articles, tiles specifically manufactured for stoves, tiles and cubes and the like the largest surface area of which is capable of being enclosed in a square of side of < 7 cm)	69079080
			Glazed flags and paving, hearth or wall tiles and mosaic cubes and the like, of common pottery (excl. Double tiles of the "spaltplatten" type, tiles specially adapted as table mats, ornamental articles, tiles specifically manufactured for stoves, tiles and cubes and the like the largest surface area of which is capable of being enclosed in a square of side of < 7 cm)	69089020
			Glazed ceramic flags and paving, hearth or wall tiles with a face of <= 90 cm <sup>2</sup> (excl. Of common pottery, double tiles of the 'spaltplatten' type, tiles specially adapted as table mats, ornamental articles and tiles specifically manufactured for stoves)	69089051
<b>J</b>	<b>Textiles</b>	<b>9</b>		
<b>J1</b>	Socks, antibacterial	9	Women's full-length hosiery of synthetic fibres, knitted or crocheted, measuring per single yarn < 67 decitex (excl. Graduated compression hosiery, pantyhose and tights and knee length stockings)	61153019
			Full-length or knee-length stockings, socks and other hosiery, incl. Footwear without applied soles, of cotton, knitted or crocheted (excl. Graduated compression hosiery, pantyhose and tights, women's full-length or knee-length stockings, measuring per single yarn < 67 decitex, and hosiery for babies)	61159500
			Knee-length stockings of synthetic fibres, knitted or crocheted (excl. Graduated compression hosiery, women's full-length stockings measuring per single yarn < 67 decitex, and hosiery for babies)	61159610
			Women's stockings of synthetic fibres, knitted or crocheted (excl. Graduated compression hosiery, pantyhose and tights, women's full-length stockings measuring per single yarn < 67 decitex and knee-length stockings)	61159691
			Full-length stockings, socks and other hosiery, incl. Footwear without applied soles, of synthetic fibres, knitted or crocheted (excl. Graduated compression hosiery, women's pantyhose and tights, full-length or knee-length stockings, and hosiery for babies)	61159699
<b>J2</b>	Sportswear, antibacterial	9	Men's or boys' shirts of synthetic fibres, knitted or crocheted (excl. Nightshirts, t-shirts, singlets and other vests)	61052010
			T-shirts, singlets and other vests of wool or fine animal hair or man-made fibres, knitted or crocheted	61099020

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Track-suits of synthetic fibres, knitted or crocheted	61121200
			Men's or boys' lined tracksuits, of man-made fibres, with an outer shell of a single identical fabric (not knitted or crocheted)	62113331
			Men's or boys' lined tracksuit tops "upper parts", of man-made fibres (not knitted or crocheted and excl. Tracksuit tops with an outer shell of a single identical fabric)	62113341
			Men's or boys' lined tracksuit bottoms "lower parts", of man-made fibres (not knitted or crocheted and excl. Tracksuit bottoms with an outer shell of a single identical fabric)	62113342
			Men's or boys' garments, of man-made fibres, n.e.s. (not knitted or crocheted)	62113390
			Women's or girls' lined tracksuits, of man-made fibres, with an outer shell of a single identical fabric (not knitted or crocheted)	62114331
			Women's or girls' lined tracksuit tops "upper parts", of man-made fibres (not knitted or crocheted and excl. Tracksuit tops with an outer shell of a single identical fabric)	62114341
			Women's or girls' lined tracksuit bottoms "lower parts", of man-made fibres (not knitted or crocheted and excl. Tracksuit bottoms with an outer shell of a single identical fabric)	62114342
			Women's or girls' garments, of man-made fibres, n.e.s. (not knitted or crocheted)	62114390
<b>J3</b>	Underwear, antibacterial	9	Men's or boys' underpants and briefs of cotton, knitted or crocheted	61071100
			Men's or boys' underpants and briefs of man-made fibres, knitted or crocheted	61071200
			Men's or boys' underpants and briefs of other textile materials, knitted or crocheted (excl. Of cotton or man-made fibres)	61071900
			Women's or girls' briefs and panties of cotton, knitted or crocheted	61082100
			Women's or girls' briefs and panties of man-made fibres, knitted or crocheted	61082200
			Women's or girls' briefs and panties of textile materials, knitted or crocheted (excl. Cotton or man-made fibres)	61082900
			Men's or boys' underpants and briefs of cotton (excl. Knitted or crocheted)	62071100
			Men's or boys' underpants and briefs of textile materials (excl. Cotton and knitted or crocheted)	62071900

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Women's or girls' singlets and other vests, briefs, panties, négligés, bathrobes, dressing gowns, housecoats and similar articles of cotton (excl. Knitted or crocheted, slips, petticoats, nightdresses and pyjamas, brassières, girdles, corsets and similar articles)	62089100
			Women's or girls' singlets and other vests, briefs, panties, négligés, bathrobes, dressing gowns, housecoats and similar articles of man-made fibres (excl. Knitted or crocheted, slips, petticoats, nightdresses and pyjamas, brassières, girdles, corsets and similar articles)	62089200
			Women's or girls' singlets and other vests, briefs, panties, négligés, bathrobes, dressing gowns, housecoats and similar articles of textile materials (excl. Of cotton or man-made fibres, knitted or crocheted, slips, petticoats, nightdresses and pyjamas, brassières, girdles, corsets and similar articles)	62089900
<b>J4</b>	shoe soles (inlay?), antibacterial	9	Waterproof footwear incorporating a protective metal toecap, with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Skating boots with ice or roller skates attached, shin-guards and similar protective sportswear)	64011000
			Waterproof footwear incorporating a protective metal toecap, with uppers of rubber and outer soles of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Skating boots with ice or roller skates attached, shin-guards and similar protective sportswear)	64011010
			Waterproof footwear incorporating a protective metal toecap, with uppers of plastic and outer soles of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Skating boots with ice or roller skates attached, shin-guards and similar protective sportswear)	64011090
			Waterproof footwear covering the knee, with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Incorporating a protective metal toecap, skating boots with ice or roller skates attached, shin-guards and similar protective sportswear)	64019100
			Waterproof footwear with outer soles of rubber or plastics, and uppers of rubber, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering the knee (excl. Footwear incorporating a protective metal toecap, and footwear with fixed attachments for skiing or skating, shin pads and similar protective devices for sports purposes)	64019110
			Waterproof footwear with outer soles of rubber or plastics, and uppers of rubber, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering the knee (excl. Footwear incorporating a protective metal toecap, and footwear with fixed attachments for skiing or skating, shin pads and similar protective devices for sports purposes)	64019190

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Waterproof footwear with uppers of rubber and outer soles of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering only the ankle (excl. Footwear incorporating a protective metal toecap, orthopaedic footwear, footwear with fixed attachments for skiing or skating, and toy footwear)	64019210
			Waterproof footwear with uppers of plastic and outer soles of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering only the ankle (excl. Footwear incorporating a protective metal toecap, orthopaedic footwear, sports footwear, footwear with fixed attachments for skiing or skating, and toy footwear)	64019290
			Waterproof footwear covering neither the ankle nor the knee, with outer soles and uppers of rubber or of plastics, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes (excl. Incorporating a protective metal toecap, orthopaedic footwear, skating boots with ice or roller skates attached, and toy footwear)	64019900
			Waterproof footwear with outer soles of rubber or plastics, and uppers of rubber, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering neither the knee nor the ankle (excl. Footwear incorporating a protective metal toecap, orthopaedic footwear, footwear, skating boots or ski boots, and shoes having the character of toys)	64019910
			Waterproof footwear with outer soles of rubber or plastics, and uppers of rubber, the uppers of which are neither fixed to the sole nor assembled by stitching, riveting, nailing, screwing, plugging or similar processes, covering neither the knee nor the ankle (excl. Footwear incorporating a protective metal toecap, orthopaedic footwear, footwear, skating boots or ski boots, and shoes having the character of toys)	64019990
			Ski-boots and cross-country ski footwear, with outer soles and uppers of rubber or plastics (excl. Waterproof footwear of heading 6401)	64021100
			Ski-boots and cross-country ski footwear, with outer soles and uppers of rubber or plastics (excl. Waterproof footwear of heading 6401)	64021210
			Snowboard boots with outer soles and uppers of rubber or plastics (excl. Waterproof footwear of heading 6401)	64021290
			Sports footwear with outer soles and uppers of rubber or plastics (excl. Waterproof footwear of heading 6401, ski-boots, cross-country ski footwear, snowboard boots and skating boots with ice or roller skates attached)	64021900
			Footwear with outer soles and uppers of rubber or plastics, with upper straps or thongs assembled to the sole by means of plugs (excl. Toy footwear)	64022000

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Footwear, incorporating a protective metal toecap, with outer soles and uppers of rubber or plastics (excl. Waterproof footwear of heading 6401, sports footwear and orthopaedic footwear)	64023000
			Footwear, incorporating a protective metal toe-cap, with uppers of rubber and outer soles of rubber or plastics (excl. Waterproof footwear of heading 6401, sports footwear and orthopaedic footwear)	64023010
			Footwear, incorporating a protective metal toe-cap, with uppers of plastics and outer soles of rubber or plastics (excl. Waterproof footwear of heading 6401, sports footwear and orthopaedic footwear)	64023090
			Footwear covering the ankle, with outer soles and uppers of rubber or plastics (excl. Incorporating a protective metal toecap, waterproof footwear of heading 6401, sports footwear, orthopaedic footwear and toy footwear)	64029100
			Footwear covering the ankle, with uppers of rubber and outer soles of rubber or plastics (excl. Incorporating a protective metal toe-cap, waterproof footwear of heading 6401, sports footwear, orthopaedic footwear and toy footwear)	64029110
			Footwear covering the ankle, with uppers of plastics and outer soles of rubber or plastics (excl. Incorporating a protective metal toe-cap, waterproof footwear of heading 6401, sports footwear, orthopaedic footwear and toy footwear)	64029190
			Footwear incorporating a protective metal toecap, with outer soles and uppers of rubber or plastics (excl. Covering the ankle, waterproof footwear of heading 6401, sports footwear and orthopaedic footwear)	64029905
			Footwear with uppers of rubber and outer soles of rubber or plastics (excl. Covering the ankle or with upper straps or thongs assembled to the sole by means of plugs, waterproof footwear of heading 6401, sports footwear, orthopaedic footwear and toy footwear)	64029910
			Footwear with uppers of plastic and outer soles of rubber or plastics, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of > 3 cm (excl. With upper straps or thongs assembled to the sole by means of plugs)	64029931
			Footwear with uppers of plastic and outer soles of rubber or plastics, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm (excl. With upper straps or thongs assembled to the sole by means of plugs)	64029939
			Slippers and other indoor footwear, with outer sole and upper of rubber or plastics (excl. Covering the ankle, footwear with a vamp made of straps or which has one or several pieces cut out, and toy footwear)	64029950
			Footwear with uppers of plastics and outer soles of rubber or plastics, with in-soles of a length of < 24 cm (excl. Covering the ankle, footwear with a vamp made of straps or which has one or several pieces cut out, footwear incorporating a protective metal toecap, indoor footwear, sports footwear, waterproof footwear of heading 6401, orthopaedic footwear and toy footwear)	64029991



Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Footwear non-identifiable as men's or women's footwear, with uppers of plastics, with outer soles of rubber or plastics, with in-soles of length $\geq 24$ cm (excl. Footwear covering the ankle, with a vamp made of straps or which has one or more pieces cut out, or incorporating a protective metal toecap, indoor or sports footwear, waterproof footwear in heading 6401, and orthopaedic footwear)	64029993
			Men's footwear with uppers of plastics and outer soles of rubber or plastics, with in-soles of a length of $\geq 24$ cm (excl. Covering the ankle, footwear with a vamp made of straps or which has one or several pieces cut out, footwear incorporating a protective metal toe-cap, indoor footwear, sports footwear, waterproof footwear of heading 6401, and orthopaedic footwear)	64029995
			Footwear with outer soles of rubber or plastics and uppers of plastics, with in-soles of a length $\geq 24$ cm, for men (excl. Footwear covering the ankle, with a vamp made of straps or which has one or more pieces cut out, or incorporating a protective metal toecap, indoor or sports footwear, waterproof footwear in heading 6401, orthopaedic footwear and footwear which cannot be identified as men's or women's)	64029996
			Footwear with outer soles of rubber or of plastics and uppers of plastics, with in-soles of a length of $\geq 24$ cm, for women (excl. Footwear covering the ankle, with a vamp made of straps or which has one or more pieces cut out, or incorporating a protective metal toecap, indoor or sports footwear, waterproof footwear in heading 6401, orthopaedic footwear and footwear which cannot be identified as men's or women's)	64029998
			Women's footwear with uppers of plastics and outer soles of rubber or plastics, with in-soles of a length of $\geq 24$ cm (excl. Covering the ankle, footwear with a vamp made of straps or which has one or several pieces cut out, footwear incorporating a protective metal toe-cap, indoor footwear, sports footwear, waterproof footwear of heading 6401, and orthopaedic footwear)	64029999
			Ski-boots and cross-country ski footwear, with outer soles of rubber, plastics, leather or composition leather and uppers of leather	64031100
			Ski-boots, cross-country ski footwear and snowboard boots, with outer soles of rubber, plastics, leather or composition leather and uppers of leather	64031200
			Sports footwear, with outer soles of rubber, plastics, leather or composition leather and uppers of leather (excl. Ski-boots, cross-country ski footwear, snowboard boots and skating boots with ice or roller skates attached)	64031900
			Footwear with outer soles of leather, and uppers which consist of leather straps across the instep and around the big toe	64032000
			Footwear with leather uppers, made on a base or platform of wood, with neither an inner sole nor a protective metal toecap	64033000
			Footwear, incorporating a protective metal toecap, with outer soles of rubber, plastics, leather or composition leather and uppers of leather (excl. Sports footwear and orthopaedic footwear)	64034000

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Footwear with outer soles and uppers of leather, made on a base or platform of wood, covering the ankle, with neither an inner sole nor a protective metal toecap	64035105
			Footwear with outer soles and uppers of leather, covering the ankle but not the calf, with in-soles of < 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, orthopaedic footwear and toy footwear)	64035111
			Men's footwear with outer soles and uppers of leather, covering the ankle but not the calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, and orthopaedic footwear)	64035115
			Women's footwear with outer soles and uppers of leather, covering the ankle but not the calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, and orthopaedic footwear)	64035119
			Footwear with outer soles and uppers of leather, covering the ankle and calf, with in-soles of < 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, orthopaedic footwear and toy footwear)	64035191
			Men's footwear with outer soles and uppers of leather, covering the ankle and calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, and orthopaedic footwear)	64035195
			Women's footwear with outer soles and uppers of leather, covering the ankle and calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, and orthopaedic footwear)	64035199
			Footwear with outer soles and uppers of leather, made on a base or platform of wood, with neither an inner sole nor a protective metal toecap (excl. Covering the ankle)	64035905
			Footwear with outer soles and uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of > 3 cm (excl. With uppers which consist of leather straps across the instep and around the big toe)	64035911
			Footwear with outer soles and uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm, with in-soles of < 24 cm in length (excl. With uppers which consist of leather straps across the instep and around the big toe, and toy footwear)	64035931
			Men's footwear with outer soles and uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm, with in-soles of >= 24 cm in length (excl. With uppers which consist of leather straps across the instep and around the big toe)	64035935
			Women's footwear with outer soles and uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm, with in-soles of >= 24 cm in length (excl. With uppers which consist of leather straps across the instep and around the big toe)	64035939

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Slippers and other indoor footwear, with outer soles and uppers of leather (excl. Covering the ankle, with a vamp or upper made of straps, and toy footwear)	64035950
			Footwear with outer soles and uppers of leather, with in-soles of < 24 cm in length (excl. Covering the ankle, incorporating a protective metal toecap, made on a base or platform of wood, without in-soles, with a vamp or upper made of straps, indoor footwear, sports footwear, orthopaedic footwear, and toy footwear)	64035991
			Men's footwear with outer soles and uppers of leather, with in-soles of >= 24 cm in length (excl. Covering the ankle, incorporating a protective metal toecap, made on a base or platform of wood, without in-soles, with a vamp or upper made of straps, indoor footwear, sports footwear, and orthopaedic footwear)	64035995
			Women's footwear with outer soles and uppers of leather, with in-soles of >= 24 cm in length (excl. Covering the ankle, incorporating a protective metal toecap, made on a base or platform of wood, without in-soles, with a vamp or upper made of straps, indoor footwear, sports footwear, and orthopaedic footwear)	64035999
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, made on a base or platform of wood, covering the ankle with neither an inner sole nor a protective metal toecap	64039105
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle but not the calf, with in-soles of < 24 cm in length (excl. Incorporating a protective metal toe-cap, sports footwear, orthopaedic footwear and toy footwear)	64039111
			Footwear (not identifiable as men's or women's footwear), with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle (but not the calf), with in-soles of a length >= 24 cm, (excl. 6403.11-00 to 6403.40-00)	64039113
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle but not the calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toe-cap, sports footwear, and orthopaedic footwear)	64039115
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle (but not the calf), with in-soles of a length >= 24 cm (excl. 6403.11-00 to 6403.40.00)	64039116
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle (but not the calf), with in-soles of a length >= 24 cm (excl. 6403.11-00 to 6403.40.00)	64039118
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle but not the calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toe-cap, sports footwear, and orthopaedic footwear)	64039119

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle and calf, with in-soles of < 24 cm in length (excl. Incorporating a protective metal toecap, sports footwear, orthopaedic footwear and toy footwear)	64039191
			Footwear non-identifiable as men's or women's footwear, with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle, with in-soles of a length >= 24 cm (excl. 6403.1-00 to 6403.40.00)	64039193
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle and calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toe-cap, sports footwear, and orthopaedic footwear)	64039195
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle, with in-soles of a length >= 24 cm (excl. 6403.11-00 to 6403.40.00 nor 6403.90-16)	64039196
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle, with in-soles of length >= 24 cm (excl. 6403.11-00 to 6403.40.00 nor 6403.91.18)	64039198
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, covering the ankle and calf, with in-soles of >= 24 cm in length (excl. Incorporating a protective metal toe-cap, sports footwear, and orthopaedic footwear)	64039199
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, made on a base or platform of wood, with neither an inner sole nor a protective metal toecap (excl. Covering the ankle)	64039905
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of > 3 cm	64039911
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm, with in-soles of < 24 cm in length (excl. Toy footwear)	64039931
			Footwear non-identifiable as men's or women's footwear, with outer soles of rubber, plastics or composition leather, with uppers of leather (not covering the ankle), with a vamp made of straps or which has one or several pieces cut out, with sole and heel height <= 3 cm, with in-soles of a length >= 24 cm (excl. 6403.11-00 to 6403.40.00)	64039933
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of <= 3 cm, with in-soles of >= 24 cm in length	64039935

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather (not covering the ankle), with a vamp made of straps or which has one or several pieces cut out, with sole and heel height $\leq 3$ cm, with in-soles of a length $\geq 24$ cm (excl. 6403.11-00 to 6403.40.00)	64039936
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather (not covering the ankle), with a vamp made of straps or which has one or several pieces cut out, with sole and heel height $\leq 3$ cm, with in-soles of a length $\geq 24$ cm (excl. 6403.11-00 to 6403.40.00)	64039938
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with a vamp made of straps or which has one or several pieces cut out, with a maximum sole and heel height of $\leq 3$ cm, with in-soles of $\geq 24$ cm in length	64039939
			Slippers and other indoor footwear, with outer soles of rubber, plastics, or composition leather and uppers of leather (excl. Covering the ankle, with a vamp made of straps or which has one or several pieces cut out, and toy footwear)	64039950
			Footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with in-soles of $< 24$ cm in length (excl. Covering the ankle, incorporating a protective metal toecap, made on a base or platform of wood, without in-soles, with a vamp made of straps or which has one or several pieces cut out, indoor footwear, sports footwear, orthopaedic footwear and toy footwear)	64039991
			Footwear non-identifiable as men's or women's footwear, with outer soles of rubber, plastics or composition leather and uppers of leather, with in-soles of a length of $\geq 24$ cm (excl. Footwear covering the ankle; with a protective metal toecap; with a main sole of wood, without in-sole; footwear with a vamp made of straps or which has one or more pieces cut out; indoor, sports or orthopaedic footwear)	64039993
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with in-soles of $\geq 24$ cm in length (excl. Covering the ankle, incorporating a protective metal toe-cap, made on a base or platform of wood, without in-soles, with a vamp made of straps or which has one or several pieces cut out, indoor footwear, sports footwear and orthopaedic footwear)	64039995
			Men's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather (not covering the ankle), with in-soles of a length $\geq 24$ cm (excl. 6403.11-00 to 6403.40.00, 6403.99.11, 6403.99.36, 6403.99.50)	64039996
			Footwear with outer soles of rubber, plastics or composition leather and uppers of leather, with in-soles of a length of $\geq 24$ cm, for women (excl. Footwear covering the ankle; with a protective metal toecap; with a main sole of wood, without in-sole; footwear with a vamp made of straps or which has one or more pieces cut out; indoor, sports or orthopaedic footwear; footwear which cannot be identified as men's or women's)	64039998

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Women's footwear with outer soles of rubber, plastics or composition leather, with uppers of leather, with in-soles of $\geq 24$ cm in length (excl. Covering the ankle, incorporating a protective metal toe-cap, made on a base or platform of wood, without in-soles, with a vamp made of straps or which has one or several pieces cut out, indoor footwear, sports footwear and orthopaedic footwear)	64039999
			Sports footwear, incl. Tennis shoes, basketball shoes, gym shoes, training shoes and the like, with outer soles of rubber or plastics and uppers of textile materials	64041100
			Slippers and other indoor footwear, with outer soles of rubber or plastics and uppers of textile materials (excl. Tennis shoes, gym shoes, training shoes and the like, and toy footwear)	64041910
			Footwear with outer soles of rubber or plastics and uppers of textile materials (excl. Indoor footwear, sports footwear, incl. Tennis shoes, basketball shoes, gym shoes, training shoes and the like, and toy footwear)	64041990
			Slippers and other indoor footwear with outer soles of leather or composition leather and uppers of textile materials (excl. Toy footwear)	64042010
			Footwear with outer soles of leather or composition leather and uppers of textile materials (excl. Indoor footwear and toy footwear)	64042090
			Footwear with uppers of leather or composition leather (excl. With outer soles of rubber, plastics, leather or composition leather and uppers of leather, orthopaedic footwear and toy footwear)	64051000
			Footwear with uppers of leather or composition leather and outer soles of wood or cork (excl. Orthopaedic footwear and toy footwear)	64051010
			Footwear with uppers of leather or composition leather (excl. With outer soles of rubber, plastics, leather or composition leather and uppers of leather, or with outer soles of wood or cork, orthopaedic footwear and toy footwear)	64051090
			Footwear with uppers of textile materials and outer soles of wood or cork (excl. Orthopaedic footwear and toy footwear)	64052010
			Slippers and other indoor footwear with uppers of textile materials (excl. With outer soles of rubber, plastics, leather or composition leather, and toy footwear)	64052091
			Footwear with uppers of textile materials (excl. With outer soles of rubber, plastics, leather or composition leather, wood or cork, indoor footwear, orthopaedic footwear and toy footwear)	64052099
			Footwear with outer soles of rubber, plastics, leather or composition leather and uppers of materials other than leather, composition leather or textile materials (excl. Orthopaedic footwear and toy footwear)	64059010

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
J5	hats, antibacterial	9	Footwear with outer soles of wood, cork, twine, paperboard, furskin, woven fabrics, felt, nonwovens, linoleum, raffia, straw, loofah, etc. And uppers of materials other than leather, composition leather or textile materials (excl. Orthopaedic footwear and toy footwear)	64059090
			Removable in-soles, heel cushions and other removable accessories	64069050
			Hat-forms, hat bodies and hoods of felt, neither blocked to shape nor with made brims; plateaux and manchons, incl. Slit manchons, of felt	65010000
			Hat-shapes, plaited or made by assembling strips of any material (excl. Blocked to shape, with made brims, lined, or trimmed)	65020000
			Hats and other headgear, plaited or made by assembling strips of any material, whether or not lined or trimmed (excl. Headgear for animals, and toy and carnival headgear)	65040000
			Hats and other headgear, knitted or crocheted, or made up from lace, of fur felt or of felt of wool and fur, made from the hat bodies, hoods or plateaux of heading 6501, whether or not lined or trimmed (excl. Made by assembling strips or pieces of felt, and toy and carnival headgear)	65050010
			Peaked caps and the like, knitted or crocheted, or made up from lace, felt or other textile fabric, in the piece (but not in strips), whether or not lined or trimmed (excl. Toy and carnival headgear)	65050030
			Hats and other headgear, knitted or crocheted, or made up from lace, felt or other textile fabric, in the piece (but not in strips), whether or not lined or trimmed (excl. Of fur felt or of felt of wool and fur, peaked caps, headgear for animals or headgear having the character of toys or festive articles)	65050090
			Bathing caps, hoods and other headgear, whether or not lined or trimmed, of rubber or plastics (other than safety headgear and headgear having the character of toys or festive articles)	65069100
			Hats and other headgear, of fur felt or of felt of wool and fur, made from the hat bodies, hoods or plateaux of heading 6501, whether or not lined or trimmed (excl. Knitted or crocheted or made up from lace, made by assembling strips or pieces of felt, and toy and carnival headgear)	65069910
			Headgear, whether or not lined or trimmed, n.e.s.	65069990
J6	gloves, antibacterial	9	Specially designed gloves for use in sport, of leather or composition leather	42032100
			Protective gloves of leather or composition leather, for all trades	42032910
			Gloves, mittens and mitts, of leather or composition leather (excl. Special sports gloves and protective gloves for all trades)	42032990

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Babies' gloves, mittens and mitts, of cotton, knitted or crocheted	61112010
			Babies' gloves, mittens and mitts for babies, of synthetic fibres, knitted or crocheted	61113010
			Mittens and mitts, impregnated, coated or covered with plastics or rubber, knitted or crocheted, and gloves, impregnated, coated or covered with plastics, knitted or crocheted	61161080
			Gloves, mittens and mitts, of wool or fine animal hair, knitted or crocheted (excl. For babies)	61169100
			Gloves, mittens and mitts, of cotton, knitted or crocheted (excl. Impregnated, coated or covered with plastics or rubber, and for babies)	61169200
			Gloves, mittens and mitts, of synthetic fibres, knitted or crocheted (excl. Impregnated, coated or covered with plastics or rubber, and for babies)	61169300
			Gloves, mittens and mitts, of textile materials, knitted or crocheted (excl. Of wool, fine animal hair, cotton or synthetic fibres, impregnated, coated or covered with plastics or rubber, and for babies)	61169900
			Gloves, mittens and mitts, of all types of textile materials (excl. Knitted or crocheted and for babies)	62160000
<b>J7</b>	matresses, mattress covers and top mattresses?	9	Mattress supports for bed frames (excl. Spring interiors for seats)	94041000
			Mattresses of cellular rubber	94042110
			Mattresses of cellular plastics	94042190
			Mattresses with spring interiors	94042910
			Mattresses, stuffed or internally filled with any material (excl. Cellular rubber or plastics, with spring interior, and pneumatic or water mattresses and pillows)	94042990
			Articles of bedding and similar furnishing, fitted with springs or stuffed or internally filled with any material or of cellular rubber or plastics (excl. Filled with feather or down, mattress supports, mattresses, sleeping bags, pneumatic or water mattresses and pillows, blankets and covers)	94049090
<b>J8</b>	Pillows	9		(not specified in complex custom numbers)



Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
<b>J9</b>	Bedding	9	Bedlinen, knitted or crocheted	63021000
			Printed bedlinen of cotton (excl. Knitted or crocheted)	63022100
			Printed bedlinen of nonwovens of man-made fibres	63022210
			Printed bedlinen of man-made fibres (excl. Nonwovens and knitted or crocheted)	63022290
			Printed bedlinen of flax or ramie (excl. Knitted or crocheted)	63022910
			Printed bedlinen of textile materials (excl. Of cotton and man-made fibres, flax or ramie, knitted or crocheted)	63022990
			Bedlinen of cotton (excl. Printed, knitted or crocheted)	63023100
			Bedlinen of nonwovens of man-made fibres (excl. Printed)	63023210
			Bedlinen of man-made fibres (excl. Nonwovens, printed, knitted or crocheted)	63023290
			Bedlinen of flax or ramie (excl. Printed, knitted or crocheted)	63023920
			Bedlinen of textile materials (excl. Of cotton, man-made fibres, flax or ramie, printed, knitted or crocheted)	63023990
			Knitted or crocheted bedspreads (excl. Bedlinen, quilts and eiderdowns)	63041100
			Bedspreads of cotton (excl. Knitted or crocheted, bedlinen, quilts and eiderdowns)	63041910
			Bedspreads of flax or ramie (excl. Knitted or crocheted, bedlinen, quilts and eiderdowns)	63041930
			Sleeping bags, whether or non-electrically heated	94043000
			Articles of bedding and similar furnishing, filled with feather or down (excl. Mattresses and sleeping bags)	94049010
<b>J10</b>	Towels	9	Toilet linen and kitchen linen, of terry towelling or similar terry fabrics of cotton (excl. Floorcloths, polishing cloths, dishcloths and dusters)	63026000
			Toilet linen and kitchen linen of cotton (excl. Of terry fabrics, floorcloths, polishing cloths, dishcloths and dusters)	63029100
			Toilet linen and kitchen linen of nonwovens of man-made fibres (excl. Floorcloths, polishing cloths, dishcloths and dusters)	63029310
			Toilet linen and kitchen linen of man-made fibres (excl. Nonwovens, floorcloths, polishing cloths, dishcloths and dusters)	63029390
			Toilet linen and kitchen linen of flax (excl. Floorcloths, polishing cloths, dishcloths and dusters)	63029910
			Toilet linen and kitchen linen of textile materials (excl. Of cotton, flax or man-made fibres, floorcloths, polishing cloths, dishcloths and dusters)	63029990

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
<b>J11</b>	Furniture, textile	9	Seats for aircraft	94016100
			Seats for motor vehicles	94017100
			Upholstered seats, with wooden frames (excl. Convertible into beds)	94011000
			Upholstered seats, with metal frames (excl. Seats for aircraft or motor vehicles, swivel seats with variable height adjustments and medical, dental or surgical furniture)	94012000
<b>J12</b>	Curtains	9	Curtains, incl. Drapes, and interior blinds, curtain or bed valances of synthetic fibres, knitted or crocheted (excl. Awnings and sunblinds)	63031200
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances, knitted or crocheted (excl. Of cotton or synthetic fibres, awnings and sunblinds)	63031900
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances of cotton (excl. Knitted or crocheted, awnings and sunblinds)	63039100
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances of nonwovens of synthetic fibres (excl. Awnings and sunblinds)	63039210
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances of synthetic fibres (excl. Nonwovens, knitted or crocheted, awnings and sunblinds)	63039290
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances of nonwovens (excl. Of cotton and synthetic fibres, awnings and sunblinds)	63039910
			Curtains, incl. Drapes, and interior blinds, curtain or bed valances of textile materials (excl. Of cotton and synthetic fibres or of nonwovens, knitted or crocheted, awnings and sunblinds)	63039990
			Unbleached or bleached warp knit fabrics of synthetic fibres "incl. Those made on galloon knitting machines", of a width of > 30 cm, for curtains, incl. Net curtain fabric (excl. Those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60053110
			Dyed warp knit fabrics of synthetic fibres "incl. Those made on galloon knitting machines", of a width of > 30 cm, for curtains, incl. Net curtain fabric (excl. Those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60053210

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Warp knit fabrics of synthetic fibres, of yarns of different colours "incl. Those made on galloon knitting machines", of a width of > 30 cm, for curtains, incl. Net curtain fabric (excl. Those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60053310
			Printed warp knit fabrics of synthetic fibres "incl. Those made on galloon knitting machines", of a width of > 30 cm, for curtains, incl. Net curtain fabric (excl. Those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60053410
			Unbleached or bleached fabrics, knitted or crocheted, of synthetic fibres, of a width of > 30 cm, for curtains, incl. Net curtain (excl. Warp knit fabrics "incl. Those made on galloon knitting machines", those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60063110
			Dyed fabrics, knitted or crocheted, of synthetic fibres, of a width of > 30 cm, for curtains, incl. Net curtain (excl. Warp knit fabrics "incl. Those made on galloon knitting machines", those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60063210
			Fabrics, knitted or crocheted, of synthetic fibres, of yarns of different colours, of a width of > 30 cm, for curtains, incl. Net curtain (excl. Warp knit fabrics "incl. Those made on galloon knitting machines", those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60063310
			Printed fabrics, knitted or crocheted, of synthetic fibres, of a width of > 30 cm, for curtains, incl. Net curtain (excl. Warp knit fabrics "incl. Those made on galloon knitting machines", those containing by weight >= 5% of elastomeric yarn or rubber thread, and pile fabrics, incl. "long pile", looped pile fabrics, and knitted or crocheted fabrics, impregnated, coated, covered or laminated)	60063410
<b>J13</b>	Textile wall covering	9	Wallpaper and similar wallcoverings of paper, consisting of paper coated or covered, on the face side, with a grained, embossed, coloured or design-printed or otherwise decorated layer of plastics	48142000
			Wallpaper and similar wallcoverings of paper, consisting of grained, embossed, surface-coloured, design-printed or otherwise surface-decorated or covered with transparent protective plastics	48149010
			Wallpaper and similar wallcoverings of paper, and window transparencies of paper (excl. Goods of subheadings 4814.20 and 4814.90.10)	48149070

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
J14	Teddy bears	9	Stuffed toys representing animals or non-human creatures	95030041
J15	Awnings, sunblinds [markiser]	9		63061200
				63061900
J16	Parasols	9	Garden or similar umbrellas (excl. Beach tents)	66011000
J17	Umbrellas	9	Umbrellas having a telescopic shaft (excl. Toy umbrellas)	66019100
			Umbrellas and sun umbrellas, incl. Walking-stick umbrellas, with a cover of woven textile materials (excl. Umbrellas having a telescopic shaft, garden umbrellas and the like, and toy umbrellas)	66019920
			Umbrellas and sun umbrellas, incl. Walking-stick umbrellas, with a cover of non-textile materials (excl. Umbrellas having a telescopic shaft, garden umbrellas and the like, and toy umbrellas)	66019990
J18	Sails	9	Railway or tramway sleepers "cross-ties" of wood, impregnated	63063000
J19	Tents [made of textiles]	9		63062200
				63062900
J20	Mosquito nets (with anti-bacterial/fungal biocides but not treated with insecticides)	9		(not found)
J21	Waterproof clothing	9		(not specified in complex custom numbers)
J22	Wool clothing, moth proofed	9	Women's or girls' overcoats, car coats, capes, cloaks and similar articles of wool or fine animal hair, knitted or crocheted	61021010
			Women's or girls' anoraks, incl. Ski jackets, windcheaters, wind-jackets and similar articles, of wool or fine animal hair, knitted or crocheted (excl. Suits, ensembles, jackets, blazers, dresses, skirts, divided skirts, trousers, bib and brace overalls)	61021090
			Men's or boys' suits of textile materials, knitted or crocheted, of wool or fine animal hair (excl. Tracksuits, ski suits and swimwear)	61031010

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Men's or boys' jackets and blazers of wool or fine animal hair, knitted or crocheted (excl. Wind-jackets and similar articles)	61033100
			Men's or boys' trousers, bib and brace overalls, breeches and shorts of wool or fine animal hair, knitted or crocheted (excl. Swimwear and underpants)	61034100
			Women's or girls' ensembles of textile materials (excl. Of cotton or synthetic fibres, ski ensembles and swimwear) of wool or fine animal hair	61042910
			Women's or girls' jackets and blazers of wool or fine animal hair, knitted or crocheted (excl. Wind-jackets and similar articles)	61043100
			Women's or girls' dresses of wool or fine animal hair, knitted or crocheted (excl. Petticoats)	61044100
			Women's or girls' skirts and divided skirts of wool or fine animal hair, knitted or crocheted (excl. Petticoats)	61045100
			Women's or girls' trousers, bib and brace overalls, breeches and shorts of wool or fine animal hair, knitted or crocheted (excl. Panties and swimwear)	61046100
			Men's or boys' shirts of wool or fine animal hair, knitted or crocheted (excl. Nightshirts, t-shirts, singlets and other vests)	61059010
			Women's or girls' blouses, shirts and shirt-blouses of wool or fine animal hair, knitted or crocheted (excl. T-shirts and vests)	61069010
			T-shirts, singlets and other vests of wool or fine animal hair or man-made fibres, knitted or crocheted	61099020
			Jerseys and pullovers containing $\geq 50\%$ by weight of wool and weighing $\geq 600$ g/article, knitted or crocheted	61101110
			Men's or boys' jerseys, pullovers, cardigans, waistcoats and similar articles, of wool, knitted or crocheted (excl. Jerseys and pullovers containing $\geq 50\%$ by weight of wool and weighing $\geq 600$ g/article, and wadded waistcoats)	61101130
			Women's or girls' jerseys, pullovers, cardigans, waistcoats and similar articles, of wool, knitted or crocheted (excl. Jerseys and pullovers containing $\geq 50\%$ by weight of wool and weighing $\geq 600$ g/article, and wadded waistcoats)	61101190
			Jerseys, pullovers, cardigans, waistcoats and similar articles, of hair of kashmir "cashmere" goats, knitted or crocheted, for men or boys (excl. Quilted articles)	61101210
			Jerseys, pullovers, cardigans, waistcoats and similar articles, of hair of kashmir "cashmere" goats, knitted or crocheted, for women or girls (excl. Quilted articles)	61101290
			Jerseys, pullovers, cardigans, waistcoats and similar articles, of fine animal hair, knitted or crocheted, for men or boys (excl. From hair of kashmir "cashmere" goats and quilted articles)	61101910
			Jerseys, pullovers, cardigans, waistcoats and similar articles, of fine animal hair, knitted or crocheted, for women or girls (excl. From hair of kashmir "cashmere" goats and quilted articles)	61101990

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Babies' gloves, mittens and mitts, of wool or fine animal hair, knitted or crocheted	61119011
			Babies' garments and clothing accessories, of wool or fine animal hair, knitted or crocheted (excl. Gloves, mittens, mitts and hats)	61119019
			Full-length or knee-length stockings, socks and other hosiery, incl. Footwear without applied soles, of wool or fine animal hair, knitted or crocheted (excl. Graduated compression hosiery, pantyhose and tights, women's full-length or knee-length stockings, measuring per single yarn < 67 decitex, and hosiery for babies)	61159400
			Gloves, mittens and mitts, of wool or fine animal hair, knitted or crocheted (excl. For babies)	61169100
			Men's or boys' overcoats, raincoats, car coats, capes, cloaks and similar articles, of wool or fine animal hair (excl. Knitted or crocheted)	62011100
			Men's or boys' anoraks, incl. Ski jackets, windcheaters, wind-jackets and similar articles, of wool or fine animal hair (excl. Knitted or crocheted, suits, ensembles, jackets, blazers and trousers)	62019100
			Men's or boys' suits of wool or fine animal hair (excl. Knitted or crocheted, tracksuits, ski suits and swimwear)	62031100
			Men's or boys' ensembles of wool or fine animal hair (excl. Knitted or crocheted, ski ensembles and swimwear)	62032930
			Men's or boys' jackets and blazers of wool or fine animal hair (excl. Knitted or crocheted, and wind-jackets and similar articles)	62033100
			Men's or boys' trousers and breeches of wool or fine animal hair (excl. Knitted or crocheted, bib and brace overalls and underpants)	62034110
			Men's or boys' bib and brace overalls of wool or fine animal hair (excl. Knitted or crocheted)	62034130
			Men's or boys' shorts of wool or fine animal hair (excl. Knitted or crocheted, underpants and swimwear)	62034190
			Women's or girls' suits of wool or fine animal hair (excl. Knitted or crocheted, ski overalls and swimwear)	62041100
			Women's or girls' ensembles of wool or fine animal hair (excl. Knitted or crocheted, ski overalls and swimwear)	62042100
			Women's or girls' jackets and blazers of wool or fine animal hair (excl. Knitted or crocheted, wind-jackets and similar articles)	62043100
			Women's or girls' dresses of wool or fine animal hair (excl. Knitted or crocheted and petticoats)	62044100
			Women's or girls' skirts and divided skirts of wool or fine animal hair (excl. Knitted or crocheted and petticoats)	62045100
			Women's or girls' trousers and breeches of wool or fine animal hair (excl. Knitted or crocheted, panties and swimwear)	62046110

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Women's or girls' bib and brace overalls and shorts, of wool or fine animal hair (excl. Knitted or crocheted, panties and swimwear)	62046185
			Women's or girls' blouses, shirts and shirt-blouses of wool or fine animal hair (excl. Knitted or crocheted and vests)	62062000
			Babies' garments and clothing accessories of wool or fine animal hair (excl. Knitted or crocheted and hats)	62099010
			Shawls, scarves, mufflers, mantillas, veils and similar articles of wool or fine animal hair (excl. Knitted or crocheted)	62142000
<b>J23</b>	Wool covered furniture, moth proofed	9		(not specified in complex custom numbers)
<b>J24</b>	Wollen carpets and rugs	9	Carpets and other textile floor coverings, of wool or fine animal hair, knotted, whether or not made up, containing > 10% silk or waste silk other than noil by weight	57011010
			Carpets and other textile floor coverings, of wool or fine animal hair, knotted, whether or not made up (excl. Those containing > 10% silk or waste silk other than noil by weight)	57011090
			Carpets and other textile floor coverings, of silk, waste silk other than noil, synthetic fibres or metallised yarn of heading 5605, or of textile materials containing metal yarn, knotted, whether or not made up	57019010
			Carpets and other textile floor coverings, of textile materials, knotted, whether or not made up (excl. Those of wool or fine animal hair, of silk or waste silk other than noil, or of textile materials containing metal yarn)	57019090
			Kelem, schumacks, karamanie and similar hand-woven rugs, whether or not made up	57021000
			Axminster carpets of wool or fine animal hair, of pile construction, not made up	57023110
			Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, of pile construction, not made up (excl. Axminster, kelem, schumacks, karamanie and similar hand-woven rugs)	57023180
			Axminster carpets of wool or fine animal hair, of pile construction, made up	57024110
			Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, of pile construction, made up (excl. Kelem, schumacks, karamanie and similar handwoven rugs, and axminster carpets)	57024190
Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, not of pile construction, not made up (excl. Kelem, schumacks, karamanie and similar hand-woven rugs)	57025010			

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Carpets and other floor coverings, of wool or fine animal hair, woven, not tufted or flocked, not of pile construction, made up (excl. Kelem, schumacks, karamanie and similar hand-woven rugs)	57029100
			Carpets and other floor coverings, of wool or fine animal hair, tufted "needle punched", whether or not made up	57031000
			Tiles, of vegetable textile materials or coarse animal hair, tufted "needle punched", whether or not made up (excl. Carpet tiles with an area of > 1 m <sup>2</sup> )	57039020
			Carpet and other floor coverings, of vegetable textile materials or coarse animal hair, tufted "needle punched", whether or not made up (excl. Carpet tiles with an area of <= 1 m <sup>2</sup> )	57039080
			Floor tiles, of felt, not tufted or flocked, with an area of <= 0,3 m <sup>2</sup>	57041000
			Carpets and other floor coverings, of felt, not tufted or flocked, whether or not made up (excl. Floor tiles with an area of <= 0,3 m <sup>2</sup> )	57049000
			Blankets and travelling rugs of wool or fine animal hair, knitted or crocheted (excl. Electric, table covers, bedspreads and articles of bedding and similar furnishing of heading 9404)	63012010
			Blankets and travelling rugs, of wool or fine animal hair (excl. Knitted or crocheted, electric, table covers, bedspreads and articles of bedding and similar furnishing of heading 9404)	63012090
<b>J25</b>	<b>Wet blue hides and other hides</b>	9	Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired, unsplit, of a weight per skin <= 16 kg, fresh	41012010
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired, unsplit, of a weight per skin <= 16 kg, wet-salted	41012030
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired, unsplit, of a weight per skin <= 8 kg when simply dried or <= 10 kg when dry-salted	41012050
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired, unsplit, of a weight per skin <= 16 kg, limed, pickled or otherwise preserved (excl. Fresh or wet-salted, simply dried or dry-salted, tanned, parchment-dressed or further prepared)	41012080
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired or split, of a weight per skin > 16 kg, fresh	41015010
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired or split, of a weight per skin > 16 kg, wet-salted	41015030



Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired or split, of a weight per skin > 16 kg, dried or dry-salted	41015050
			Whole raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired or split, of a weight per skin > 16 kg, limed, pickled or otherwise preserved (excl. Fresh or wet-salted, simply dried or dry-salted, tanned, parchment-dressed or further prepared)	41015090
			Butts, bends, bellies and split raw hides and skins of bovine "incl. Buffalo" or equine animals, whether or not dehaired, fresh, or salted, dried, limed, pickled or otherwise preserved, and whole raw hides and skins of a weight per skin > 8 kg but < 16 kg when simply dried and > 10 kg but < 16 kg when dry-salted (excl. Tanned, parchment-dressed or further prepared)	41019000
			Raw hides and skins of reptiles, fresh or salted, dried, limed, pickled or otherwise preserved (excl. Tanned, parchment-dressed or further prepared)	41032000
			Raw hides and skins of swine, fresh, or salted, dried, limed, pickled or otherwise preserved, whether or not dehaired or split (excl. Tanned, parchment-dressed or further prepared)	41033000
			Other raw hides and skins, fresh or salted, dried, limed, pickled or otherwise preserved, whether or not dehaired, incl. Bird-skins without feathers or down (excl. Parchment-dressed, hides and skins of bovine animals, equine animals, sheep, lambs, goats, kids and reptiles)	41039000
			Hides and skins of east india kip, without hair on, whole, whether or not the heads and legs have been removed, in the dry state "crust", with a surface area of <= 2,6 m <sup>2</sup> "28 square feet" and each weighing <= 4,5 kg, not further prepared than vegetable tanned, whether or not having undergone certain treatments, but obviously unsuitable for immediate use for the manufacture of leather articles (excl. Full grains, unsplit and grain splits)	41044911
			Whole hides and skins of bovine "incl. Buffalo" animals, with a surface area of <= 2,6 m <sup>2</sup> "28 square feet", in the dry state "crust", without hair on, whether or not split (excl. Further prepared and full grains, unsplit, grain splits and hides and skins of east india kip of subheading 4104.49.11)	41044919
			Whole hides and skins of bovine "incl. Buffalo" animals, with a surface area of > 2,6 m <sup>2</sup> "28 square feet", in the dry state "crust", without hair on, whether or not split (excl. Further prepared and full grains, unsplit and grain splits)	41044951
			Hides and skins of bovine "incl. Buffalo" animals, with a surface area of > 2,6 m <sup>2</sup> "28 square feet", in the dry state "crust", without hair on, whether or not split (excl. Further prepared and whole hides and skins and full grains, unsplit and grain splits)	41044959
			Hides and skins of equine animals, in the dry state "crust", without hair on, whether or not split (excl. Further prepared and full grains, unsplit and grain splits)	41044990

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Indian hair sheep skins, in the dry state "crust", without wool on, vegetable pre-tanned, whether or not having undergone certain treatments, but obviously unsuitable for immediate use for the manufacture of leather articles	41053010
			Indian goat or kid skins, in the dry state "crust", without wool on, vegetable pre-tanned, whether or not having undergone certain treatments, but obviously unsuitable for immediate use for the manufacture of leather articles	41062210
			Hides and skins of antelopes, deer, elks, elephants and other animals, incl. Sea animals, without wool or hair on, and leather of hairless animals, in the dry state "crust", whether or not split (excl. Further prepared and of bovine and equine animals, sheep and lambs, goats and kids, swine and reptiles, and pre-tanned only)	41069200
<b>J26</b>	<b>Paper products with intentional addition of preservatives or film preservatives</b>	7, 9	Photographic paper, paperboard and textiles, sensitised, unexposed, in rolls > 610 mm wide	37031000
			Photographic paper, paperboard and textiles, sensitised, unexposed, for colour photography "polychrome" (excl. Products in rolls > 610 mm wide)	37032000
			Photographic paper, paperboard and textiles, sensitised, unexposed, for monochrome photography (excl. Products in rolls > 610 mm wide)	37039000
			Photographic paper, paperboard and textiles, exposed but not developed	37040090
			Particle board of wood, whether or not agglomerated with resins or other organic binding substances, surface-covered with melamine-impregnated paper (excl. Oriented strand board and waferboard, fibreboard and cellular wood panels)	44101130
			Tarred, bituminized or asphalted paper and paperboard, in rolls or sheets as specified in note 7a and 7b to chapter 48	48111000
			Self-adhesive paper and paperboard, surface-coloured, surface-decorated or printed, in strips, rolls or sheets of a width of <= 10 cm, coated with unvulcanised natural or synthetic rubber	48114120
			Self-adhesive paper and paperboard, surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. Of a width of <= 10 cm coated with unvulcanised natural or synthetic rubber and goods of heading 4810)	48114190
			Gummed or adhesive paper and paperboard, surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. Self-adhesive and goods of heading 4810)	48114900
			Paper and paperboard, surface-coloured, surface-decorated or printed, coated, impregnated or covered with artificial resins or plastics, in rolls or in square or rectangular sheets, of any size, bleached and weighing > 150 g/m <sup>2</sup> (excl. Adhesives)	48115100

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Paper and paperboard, surface-coloured, surface-decorated or printed, coated, impregnated or covered with artificial resins or plastics, in rolls or in square or rectangular sheets, of any size (excl. Bleached and weighing > 150 g/m <sup>2</sup> , and adhesives)	48115900
			Paper and paperboard, coated, impregnated or covered with wax, paraffin wax, stearin, oil or glycerol, in rolls or in square or rectangular sheets, of any size (excl. Goods of heading 4803, 4809 and 4818)	48116000
			Paper, paperboard, cellulose wadding and webs of soft cellulose, coated, impregnated, covered, surface-coloured, surface-decorated or printed, in rolls or in square or rectangular sheets, of any size (excl. Goods of heading 4803, 4809, 4810 and 4818, and of subheading 4811.10 to 4811.60)	48119000
<b>K</b>	<b>Stuffed animals [taxidermist works]</b>			
<b>K1</b>	<b>Stuffed animals [taxidermist works]</b>	22		(Not found)
<b>L</b>	<b>Toilet/bathroom appliances and materials</b>			
<b>L1</b>	Toilet lids, with film preservatives	7	Lavatory seats and covers, of plastics	39222000
			Bidets, lavatory pans, flushing cisterns and similar sanitary or hygiene products, of plastics (excl. Baths, showers, washbasins, lavatory seats and covers)	39229000
<b>L2</b>	Bathtubs and spas, with film preservatives	7	Baths of cast iron, whether or not enamelled	73242100
			Baths of steel sheet	73242900
<b>L3</b>	Toothbrushes, with film preservatives	7	Tooth brushes, incl. Dental-plate brushes	96032100
<b>L4</b>	Toilet paper, with bio-cides	9	Toilet or facial tissue stock, towel or napkin stock and similar paper for household or sanitary purposes, whether or not creped, crinkled, embossed, perforated, surface-coloured, surface-decorated or printed, in rolls of a width > 36 cm or in square or rectangular sheets with one side > 36 cm and the other side > 15 cm in the unfolded state (excl. Cellulose wadding, creped paper and webs of cellulose fibres "tissues")	48030090
			Toilet paper in rolls of a width of ≤ 36 cm, weighing per ply ≤ 25 g/m <sup>2</sup>	48181010

Ref. #	Article type	PT (BPD, Annex V)	Custom code name (combined nomenclature, 2012)	Custom code
			Toilet paper in rolls of a width of $\leq 36$ cm, weighing per ply $> 25$ g/m <sup>2</sup>	48181090
<b>L5</b>	Toothbrush covers, with film preservatives	7	Household articles and toilet articles, of plastics (excl. Tableware, kitchenware, baths, shower-baths, washbasins, bidets, lavatory pans, seats and covers, flushing cisterns and similar sanitary ware)	39249000
<b>L6</b>	Diapers with antibacterial treatment		Sanitary towels and tampons, napkins and napkin liners for babies and similar sanitary articles, of wadding of man-made fibres	96190051
			Sanitary towels and tampons, napkins and napkin liners for babies and similar sanitary articles, of wadding of vegetable textile materials	96190059
			Napkins and napkin liners for babies, and similar articles, knitted or crocheted, of textile materials (excl. Of wadding)	96190031
			Napkins and napkin liners for babies, and similar articles, of textile materials (excl. Of wadding, and knitted or crocheted)	96190090
			Sanitary towels and tampons, napkins and napkin liners for babies, and similar articles (excl. Of paper pulp, paper, cellulose or textile materials)	96190039

## Questionnaire on biocidal products marketed in Denmark

The Danish Environment Protection Agency (DEPA) has initiated a survey of the Danish market for biocidal products<sup>1</sup> with a view to the future administration of, and information about, the Biocidal Product Regulation<sup>2</sup>, entering into force in September 2013. DEPA has contracted COWI to conduct the survey, which is to be reported by mid December this year. As a part of this survey, DEPA needs an overview of importers and producers marketing biocidal products in Denmark. The questionnaire is part of this effort. Please see DEPA's support letter for the survey attached. Any confidential information will only be published in an aggregated, anonymised form. Kindly note if you consider any of the provided information as confidential (note it in the relevant cells). Questions to this questionnaire can be addressed to Christian Nyander Jeppesen via e-mail [CNJE@cowi.dk](mailto:CNJE@cowi.dk) or by phone no. (+45) 56 40 68 30.

Please return the filled in questionnaire to Christian Nyander Jeppesen, COWI, on e-mail [CNJE@cowi.dk](mailto:CNJE@cowi.dk) no later than 3<sup>rd</sup> December 2012.

### 1. Information about the company

Company name	
Company address (Danish headquarters, Danish representation, or other primary address)	
Contact person for this reply: Name, phone no. and e-mail address	

### 2. Information about biocidal products imported to, or produced in, Denmark

The Biocidal Products Directive (in force)<sup>3</sup> works with a list of product types (PT), which can be seen [here](#). Kindly tick off the product types, your company import to, or produce in, Denmark.

Biocidal product types (according to the Biocidal Products Directive), which the company imports to the Danish market (tick off product types; see description of types <a href="#">here</a> )																							
PT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	*	21	22	23
Are the imported product types intended solely for the company's own use? (tick off)																				Yes	No		
If yes, what are they used for? (describe briefly; supplement in annexes):																							

Biocidal product types which the company produce and market in Denmark (tick off product types; see description of types <a href="#">here</a> )																							
PT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	*	21	22	23

\* PT20 is not relevant for this survey, as it is not included in the Biocidal Products Regulation.

<sup>1</sup> Biocidal products means products, which have a primary biocidal function in the use phase.

<sup>2</sup> Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.

<sup>3</sup> Directive 98/8/EC on the placing on the market of biocidal products.





### **Survey of biocidal products in Denmark**

A survey of biocidal products marketed in Denmark and a survey of imported articles that may contain biocidal active substances have been undertaken.

### **Kortlægning af biomidler i Danmark**

Der er gennemført en kortlægning af biocidmidler, som markedsføres i Danmark, og en kortlægning af importerede artikler som potentielt kan indeholde biocidaktivstoffer.



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