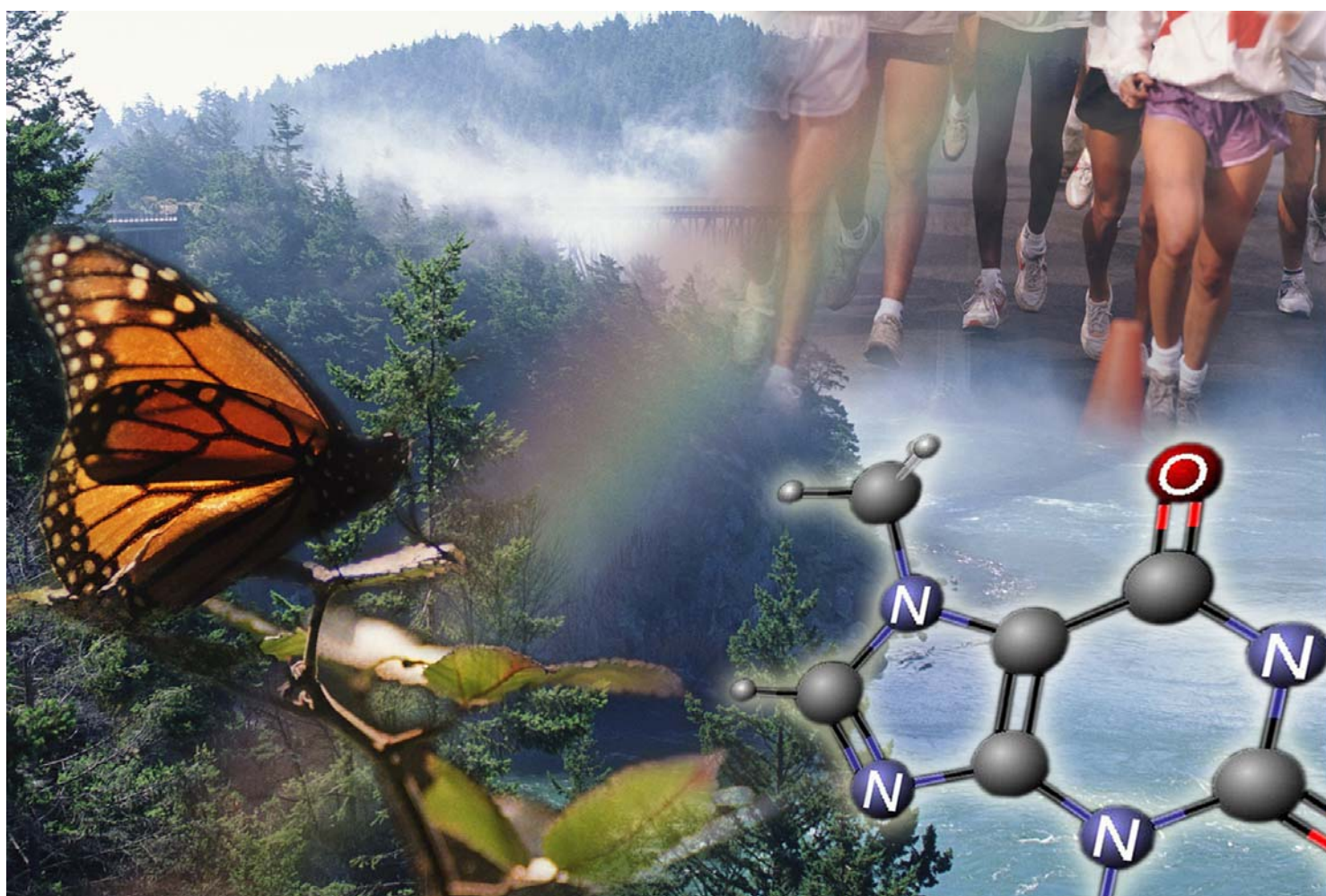


Guidance on information requirements and chemical safety assessment

Chapter R.12: Use descriptor system



May 2008
(version 1.2)

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PREFACE

This document describes the information requirements under REACH with regard to substance properties, exposure, uses and risk management measures, and the chemical safety assessment. It is part of a series of guidance documents that are aimed to help all stakeholders with their preparation for fulfilling their obligations under the REACH regulation. These documents cover detailed guidance for a range of essential REACH processes as well as for some specific scientific and/or technical methods that industry or authorities need to make use of under REACH.

The guidance documents were drafted and discussed within the REACH Implementation Projects (RIPs) led by the European Commission services, involving stakeholders from Member States, industry and non-governmental organisations. These guidance documents can be obtained via the website of the European Chemicals Agency (http://echa.europa.eu/reach_en.asp). Further guidance documents will be published on this website when they are finalised or updated.

This document relates to the REACH Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006¹

¹ Corrigendum to Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006); amended by Council Regulation (EC) No 1354/2007 of 15 November 2007 adapting Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) by reason of the accession of Bulgaria and Romania (OJ L 304, 22.11.2007, p. 1).

DOCUMENT HISTORY

Version	Comment	Date
Version 1	First edition	May 2008
Version 1.1	<ul style="list-style-type: none">– The process categories (PROC) related to operation of metals and other minerals have been included into the PROC numbering system– SU 10 has been slightly re-phrased– “PC 39, personal care products” have been added– Pulp has been added in SU 6 and a subdivision has been made related to “other” production or services (0-1 for “other economic activities related to chemicals” and 0-2 for “other economic activities, not related to chemicals”)– The numbering system of the article categories has been technically streamlined– All “other” has been moved from the last position in the pick-list to the first position	July 2008
Version 1.2	<ul style="list-style-type: none">– Correction on numbering from PROC 22 in Appendix R.12-3.– Moving the misplaced <i>cameras and video cameras</i> from AC 9 to AC 3-4 in Appendix R.12-4.– Adaptation of the numbering system in Appendix R.12-4 to the structure of the categories.	October 2008

Convention for citing the REACH regulation

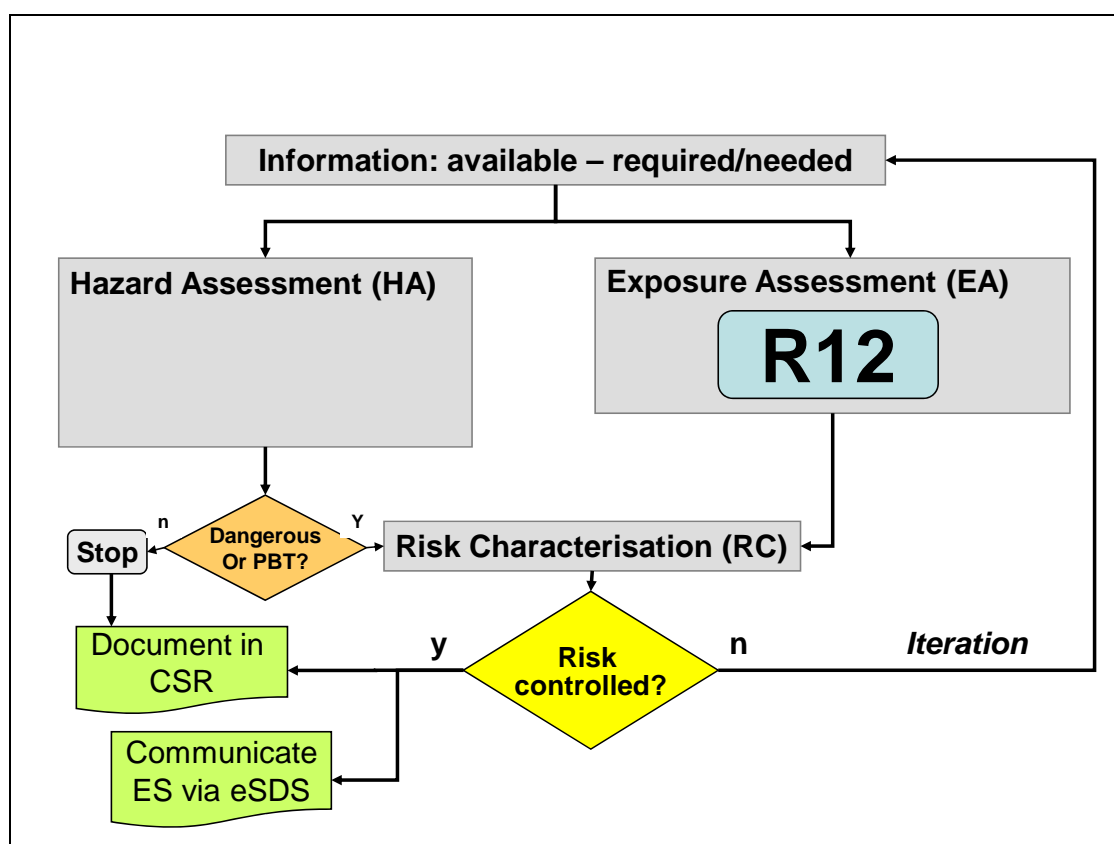
Where the REACH regulation is cited literally, this is indicated by text in italics between quotes.

Table of Terms and Abbreviations

See Chapter R.20

Pathfinder

The figure below indicates the location of chapter R.12 within the Guidance Document



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R.12 USE DESCRIPTOR SYSTEM

R.12.1 Aim of this module

Under REACH each manufacturer and importer of substances will have to develop and assess exposure scenarios for his own markets. It would be efficient for him to work out or use a suite of generic exposure scenarios for the different markets and products, which can be modified case by case if necessary. In doing so, he may be able to link the internal information related to products, markets and customers to exposure and product safety information.

For downstream users it would be efficient to receive standardised exposure scenarios for the relevant applications of the substances in their sector, and not a wide range of different scenarios from different suppliers. In order to support i) the “recycling” of exposure scenario and ii) to facilitate standardisation of exposure scenarios, the following sections outline a system to flag the scope and applicability of an ES in a short title.

Short titles will help the suppliers and customers to structure their communication with each other. Based on the short titles, the DU should be able to quickly establish whether a received exposure scenario may cover his uses. It should be also possible for him to describe a use that he wishes to make known to the supplier. The supplier will be interested to receive information on uses in a standardised way from his customers and not in the form of free text letters.

Also, the descriptors are designed in a way that they can be used to identify the suitable exposure estimation entry in one of the available Tier 1 exposure estimation tool (see Section D.5)

This chapter aims to explain in more detail the background of the descriptor system ([Section R.12.2](#) to [R.12.6](#)). The descriptor pick-lists are contained in [Appendix R.12-1](#) to [R.12-5](#).

R.12.2 Definition of the four descriptors

The use description is based on four elements: sector of use (SU), chemical product category (PC)², process category (PROC) and article category (AC). The list of article categories includes articles with intended release of substances and articles without such intended release. Figure R.12-1 exemplifies the descriptor system. In the example substance A has two different identified uses with the corresponding exposure scenarios: i) Substance is used in paints/coatings applied by industrial spray painting to construction products. ii) Substance is used in paints/coatings applied e.g. by craftsmen through brushing.

² Includes mainly categories of preparations (= mixtures) and a few categories for substances

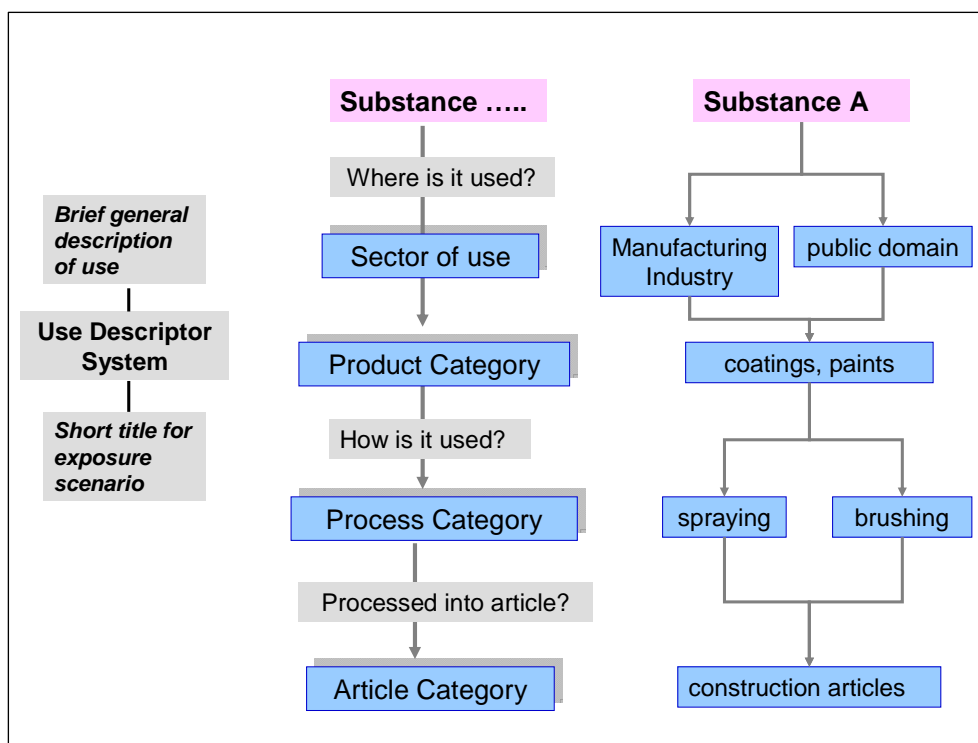


Figure R.12-1: Descriptor system for short titles and a brief general description of use

R.12.3 Sectors of use [SU]

Usually, a substance passes different sectors of trade and industry before it reaches its final destination. Under REACH, each of these stages represents an identified use. Often the life cycle includes one or more formulation stages in the chemical industry, and one or more distribution (and re-packing) stages in the trade sector. The manufacturer or importer does not need to address each of these standard operations separately for each sector. He can apply generic ES related to loading/unloading, charging, mixing, discharging, or filling of packages, largely independent from where this activity take place. However he must take into account that for example the conditions of mixing and substance transfer in the chemical industry and mixing/substance transfer on end-use may largely differ from each other.

A manufacturer or importer can identify the main uses of a substance based on his customer database or market segments. [Appendix R.12-1](#) contains a selection of internationally harmonized NACE (Nomenclature générale des Activités Economiques dans les Communautés Européennes) categories for classifying economical activities. These categories are meant to support M/I in mapping his market. Such “map” is the starting point to develop suitable exposure scenarios covering all end-uses of the substance as such or in preparation, and the subsequent life-cycle stages³. It may for example be relevant to flag the sectors of industry for which an ES is applicable, e.g. “manual spraying coatings in public domain” or “closed processing of gases in semiconductor industry” or “immersion [dipping] operations in textile finishing”. Linking a certain application process (descriptor 3) to a certain sector (descriptor 1) may in particular be useful, when a higher tier exposure assessment is needed to demonstrate control of risk, and thus the conditions of use in the exposure scenario are specifically related to a process in a certain industry.

³ The end-use is the use of a substance as such or in a preparation before the substance enters into the service life of an article, is consumed in a process by reaction, or is emitted to waste streams or the environment.

The number of categories has been limited to what is essential for ES building and what corresponds to the tools used for exposure assessment. If a manufacturer or importer considers it necessary to describe the use in more detail, he should use the more specific NACE codes, accessible over the internet link at the bottom of [Appendix R.12-1](#). If he considers that it is sufficient to be less specific regarding the use in industry, he may assign just *sector of use* category 3 “manufacturing industry”, indicating that the substance is meant to be broadly used in industry under the conditions specified in the exposure scenario.

R.12.4 Chemical product category [PC]

In context of the ES, it is more appropriate to characterize the use of a substance by the type of preparation (e.g. lubricant, cleaner, adhesive) in which the substance is known to be used, rather than the technical function of the substance as such (e.g. UV stabilizer). This is based on the consideration that the type of preparation is more closely related to exposure potential than the substance function itself. Also, there are less CBI issues around broad product categories. Nevertheless in certain cases it may be more appropriate to specify the function of a substance (e.g. solvent, intermediate). Thus the pick-list referring to this descriptor also contains a limited number of single substance functions.

[Appendix R.12-2](#) provides a pick-list of preparation categories⁴.

Based on in-house knowledge and possibly additional information from customers, M/I assigns the type of end-use preparations in which the substance is known to be used. Uses the manufacturer is not aware of, for example supplied through distributors or a longer chain of formulators, may be communicated to him from downstream during the REACH implementation process.

If the manufacturer or the DU user is unable to identify a suitable preparation category in the list, the use should be described in the free text field under “others”. In the first instance a suitable code from the UCN system shall be applied, accessible over the internet link at the bottom of [Appendix R.12-2](#). For categories marked with “1” (= ConsExpo), apply the more specific product sub-category listed in the corresponding facts sheets, instead. If this also fails, the M/I or DU should describe the technical function of the preparation type in his own words.

R.12.5 Process category [PROC]

Application techniques or process types have a direct impact on the exposure to be expected and hence on the risk management measures needed. It will facilitate building of ESs, safety assessment and communication up and down the chain, if the activities or processes relevant to a substance can be assigned to process categories.

[Appendix R.12-3](#) contains a list of process categories reflecting the exposure potential. Categorization is driven by i) the amount and form of energy applied in a process (e.g. heat, mechanical energy, radiation) ii) the surface of the substance available for exposure (dustiness of material or thickness of layers of material), and iii) the principal level of containment and engineering controls to be expected.

⁴ The list has been derived on the basis of the existing UC 55 system, the Nordic UCN system, the product categories used in the TRA as well as ConsExpo.

The list has been derived based on the “*exposure scenario*” defined in the TRA for workers⁵ and the concept of “*operation units*” as incorporated in the RISKOFDERM model. In order to facilitate exposure assessment related to workers, the TRA process categories have been chosen as a starting point. Where the scope of the category is similar, reference is made to the “operation unit” as well. This type of use description will develop during the implementation of REACH and hence the free-text field (PROCxyz) plays an important role for communication of process types which cannot be assigned to one of the so far proposed categories.

In order to illustrate how the applications of a substance can be assigned to one of the process categories, a few examples are presented in [Table R.12-1](#). These examples are meant to explain the concept behind the categories.

⁵ Revision plan to make the TRA REACH-fit (May 2007)

Table R.12-1: Examples for assigning process categories to the use of a substance

Examples for process/activity	Process category from Appendix R.12-3	Common features relevant for exposure
Spraying of paints, cleaners or air care products	Air dispersive techniques, like e.g. Spraying (PROC 7 and 11)	Substances can be inhaled as aerosols. The energy of the aerosol particles may require particular exposure controls; in case of coating, overspray may lead to waste water and waste.
Washing of textiles or metal parts; dyeing and finishing of textiles, leather or paper; powder coating;	Immersion operations like for example dipping and pouring (PROC 13)	Substance is applied to a surface by dipping the article into a bath. Depending on the function of the substance it stays in the bath or fixes to the article. Formation of dust and aerosols usually low, releases can be easily controlled. Discharge or waste disposal of waste water and/or exhausted baths may be relevant.
Coating floors, painting walls by brushing or rolling, printing operations Cleaning surfaces by wiping, brushing	Low energy spreading like for example rolling, brushing (PROC 10)	Exposure during spreading of the substance is mainly driven by the substance properties (e.g. vapour pressure) or direct skin contact. Formation of dust and aerosols unlikely; cleaning of devices and machinery may lead to waste water and/or waste.
Mechanical cutting, grinding drilling or sanding	High mechanical work up of substances bound in materials No own process category yet defined. May be considered as similar to spray conditions (PROC 11)	Substantial thermal or kinetic energy applied to substance by grinding, mechanical cutting, drilling or sanding. Release of solids (dust) or fumes to be expected
Welding, soldering, gouging, brazing flame cutting	Hot work operations: no suitable category yet defined	Exposure due to the release of fumes to be expected
Mixing of solids and liquids in batch formulation of coatings, cleaners, plastic compounds, dye stuffs...	Use in closed batch process (PROC 3) Mixing and blending in batch process (multistage and/or significant contact) (PROC 5)	Predominant handling in contained manner (e.g. through enclosed transfers), but some opportunity of contact (e.g. during sampling) Solid or liquid materials can be released as vapour or dust, significant contact possible
Hand mixing of plasters	TRA: Hand-mixing (PROC 19)	Addresses occupations where intimate and intentional contact with substances occurs without any specific exposure controls other than PPE.

If none of the activity/process categories seems applicable, the manufacturer or importer should describe the nature of the application process in own words, preferably by making reference to one of the categories in [Appendix R.12-3](#) and modifying that category as appropriate. This includes an analysis of the assumptions and data based on which the category has been defined and a conclusion which of the assumptions do not match with the use to be described.

R.12.6 Article Categories [AC]

For dangerous substances processed into articles, the manufacturer or importer of the substance may find it necessary to specify which types of articles are covered in the CSA and the ESs. It may, e.g., make a difference in terms of exposure whether a substance is used in textile-finishing of clothes (dermal contact, frequent washing) or as a component in insulation sheets for construction purpose.

[Appendix R.12-4](#) contains a list of broad article types with no intended release based on the consumer product categories contained in the ECETOC TRA tool and some additions made from the environment perspective.

If a manufacturer, importer or DU fails to identify a suitable category or wishes to be more specific, the TARIC system should be used to further specify the type of articles relevant.

[Appendix R.12-5](#) contains an indicative list of examples of articles with intended release. This list is open to additions during the REACH implementation process, it is however expected that it remains a relatively short list of single cases.

For substances used as processing aid or chemically reacted upon use, and not becoming part of an article (e.g. solvents, cleaners and laundry detergents) the fourth descriptor is not relevant.

Appendices

Appendix R.12-1: Descriptor for sector of use (SU)

	Sectors of use [SU]	NACE ⁶ codes
SU 0-1	Other activity related to manufacturing of chemical products (NACE Code to be used only; see last row)	
SU 0-2	Other activities related to manufacture and services (NACE Code to be used only: see last row)	
SU1	Agriculture, forestry, fishery	A
SU2	Mining, (including offshore industries)	B
SU3	Industrial Manufacturing (all)	C
SU4	Manufacture of food products	10,11
SU5	Manufacture of textiles, leather, fur	13-15
SU6	Manufacture of pulp, paper and paper products	17
SU7	Printing and reproduction of recorded media	18
SU8	Manufacture of bulk, large scale chemicals (including petroleum products)	19.2+20.1
SU9	Manufacture of fine chemicals	20.2-20.6
SU10	Formulation [mixing] of preparations and/or re-packaging	
SU11	Manufacture of rubber products	22.1
SU12	Manufacture of plastics products, including compounding and conversion	22.2
SU13	Manufacture of other non-metallic mineral products, e.g. plasters, cement	23
SU14	Manufacture of basic metals	24
SU15	Manufacture of fabricated metal products, except machinery and equipment	25
SU16	Manufacture of computer, electronic and optical products, electrical equipment	26-27
SU17	General manufacturing, e.g. machinery, equipment, vehicles, other transport equipment.	28-30,33
SU18	Manufacture of furniture	31
SU19	Building and construction work	F
SU20	Health services	86
SU21	Private households (= general public = consumers)	T
SU22	Public domain (administration, education, entertainment, services, craftsmen)	
SU23	Recycling	38
http://ec.europa.eu/comm/competition/mergers/cases/index/nace_all.html		

⁶ European Commission, Competition: List of NACE Codes (2007.11.19);

http://ec.europa.eu/comm/competition/mergers/cases/index/nace_all.html

Appendix R.12-2: Descriptor for types of preparations [PC = Chemical Product Category]

Types of preparations [PC = Product Category] ⁷		
PC0	Other products ⁸ (use ConsExpo subcategories or UCN codes: see last row)	
PC1	Adhesives, Sealants	2
PC2	Adsorbents	
PC3	Air care products	
PC4	Anti-Freeze and De-icing products	
PC5	Artists Supply and Hobby preparations	2
PC6	Automotive Care Products***	2
PC7	Base metals and alloys	
PC8	Biocidal Products (e.g. Disinfectants, pest control)	1
PC9	Coatings and Paints, Fillers, Putties, Thinners	1, 2
PC10	Building and construction preparations not covered elsewhere	1
PC11	Explosives	
PC12	Fertilizers	
PC13	Fuels	2
PC14	Metal surface treatment products, including galvanic and electroplating products	
PC15	Non-metal-surface treatment products	
PC16	Heat Transfer Fluids	
PC17	Hydraulic Fluids	
PC18	Ink and Toners	
PC19	Intermediate	
PC20	Products such as ph-regulators, flocculants, precipitants, neutralization agents, other unspecific	
PC21	Laboratory Chemicals	
PC22	Lawn and Garden Preparations, including fertilizers	2
PC23	Leather tanning, dye, finishing, impregnation and care products	
PC24	Lubricants, Greases and Release Products	2
PC25	Metal Working Fluids	
PC26	Paper and board dye, finishing and impregnation products	
PC27	Plant Protection Products	
PC28	Perfumes, Fragrances	
PC29	Pharmaceuticals	
PC30	Photochemicals	
PC31	Polishes and Wax Blends	2
PC32	Polymer Preparations and Compounds	

⁷ The remark in the right column refers to consumer product categories particularly addressed in ConsExpo exposure estimation tool (1) or in the TRA exposure estimation tool (2).

⁸ To be specified in free text field. It is recommended to make reference to sub-categories covered in the ConsExpo fact sheets (consumer products) or in one of the Nordic use categories (UCN);

Types of preparations [PC = Product Category] ⁷		
PC33	Semiconductor	
PC34	Textile dyes, finishing and impregnating products	
PC35	Washing and Cleaning Products (including solvent based products)	1, 2
PC36	Water softeners	
PC37	Water treatment chemicals	
PC38	Welding and soldering products, flux products	
PC39	Cosmetics, personal care products	1
PC40	Extraction agents	
http://www.rivm.nl/en/healthanddisease/productsafety/ConsExpo.jsp http://195.215.251.229/fmi/xsl/spin/SPIN/guide/menuguide.xsl?-db=spinguide&-lay=overview&-view#		

Appendix R.12-3: Descriptor for process categories [PROC]

Descriptor for process categories [PROC]		
	Process categories based on TRA categories for workers ⁹ ;	Examples and explanations
PROC0	Other Process or activity	
PROC1	Use in closed process, no likelihood of exposure Industrial setting;	Use of the substances in high integrity contained system where little potential exists for exposures, e.g. any sampling via closed loop systems.
PROC2	Use in closed, continuous process with occasional controlled exposure (e.g. sampling) Industrial setting;	Continuous process but where the design philosophy is not specifically aimed at minimizing emissions It is not high integrity and occasional expose will arise e.g. through maintenance, sampling and equipment brakings
PROC3	Use in closed batch process (synthesis or formulation) Industrial setting;	Batch manufacture of a chemical or formulation where the predominant handling is in a contained manner, e.g. through enclosed transfers, but where some opportunity for contact with chemicals occurs, e.g. through sampling
PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises Industrial setting;	Use in batch manufacture of a chemical where significant opportunity for exposure arises, e.g. during the charging, the sampling or discharge of material, and when the nature of the design is likely to result in exposure.
PROC5	Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) Industrial setting;	Manufacture or formulation of chemical products or articles using technologies related to mixing and blending of solid or liquid materials, and where the process is in stages and provides the opportunity for significant contact at any stage.
PROC6	Calendering operations Industrial setting;	Processing of product matrix Calendering at elevated temperature an large exposed surface
PROC7	Spraying in industrial settings and applications Industrial setting;	Air dispersive techniques Spraying for surface coating, adhesives, polishes/cleaners, air care products, sandblasting; Substances can be inhaled as aerosols. The energy of the aerosol particles may require advanced exposure controls; in case of coating, overspray may lead waste water and waste.
PROC8	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non dedicated facilities Industrial or non-industrial setting;	Sampling, loading, filling, transfer, dumping, bagging in non dedicated facilities. Exposure related to dust, vapour, aerosols or spillage, and cleaning of equipment to be expected.
PROC9	Transfer of substance or preparation into small containers (dedicated filling line, including weighing) Industrial setting;	Filling lines specifically designed to for both, capturing vapour and aerosol emissions and minimise spillage
PROC10	Roller application or brushing of adhesive and other coating Industrial or non-industrial setting;	Low energy spreading, Including cleaning of surfaces. Substance can be inhaled as vapours, skin contact through droplets, splashes, working with wipes and handling of treated surfaces.
PROC11	Spraying outside industrial settings or applications	Air dispersive techniques (OU9) Spraying for surface coating, adhesives, polishes/cleaners, air

⁹ additional some operation units that could not be assigned to a TRA category yet⁹

Descriptor for process categories [PROC]		
	Process categories based on TRA categories for workers ⁹ ;	Examples and explanations
		care products, sandblasting; (also includes manufacture of foam, including blowing operations) Substances can be inhaled as aerosols. The energy of the aerosol particles may require advanced exposure controls; in case of coating, overspray may lead waste water and waste.
PROC12	Use of blow agents in manufacture of foam Industrial setting;	
PROC13	Treatment of articles by dipping and pouring Industrial or non industrial setting;	Immersion operations (OU5) Treatment of articles by dipping, pouring, immersing, soaking, washing out or washing in substances; including cold formation or resin type matrix. Includes handling of treated objects (e.g. after dyeing, plating.). Substance is applied to a surface by low energy techniques as dipping the article into a bath or pouring a preparation onto a surface
PROC14	Production of preparations or articles by tableting, compression, extrusion, pelettisation Industrial setting;	
PROC15	Use a laboratory reagent Non-industrial setting;	Use of substances at small scale laboratory (< 1 l or 1 kg). Larger laboratories and R+D installations should be treated as industrial processes.
PROC16	Using material as fuel sources, limited exposure to unburned product to be expected Industrial or non-industrial setting;	Covers the use of material as fuel sources (including additives) where limited exposure to the product in its unburned form is expected. Does not cover exposure as a consequence of spillage or combustion.
PROC17	Lubrication at high energy conditions and in partly open process Industrial or non-industrial setting;	Lubrication at high energy conditions (temperature, friction) between moving parts and substance; significant part of process is open to workers or to the environment The metal working fluid may form aerosols or fumes due to rapid moving metal parts; exhausted cutting fluids need to be disposed off as waste
PROC18	Greasing at high energy conditions Industrial or non-industrial setting;	Use as lubricant where significant energy or temperature is applied between the substance and the moving parts.
PROC19	Hand-mixing with intimate contact and only PPE available. Non-industrial setting.	Addresses occupations where intimate and intentional contact with substances occurs without any specific exposure controls than PPE.
PROC20	Heat and pressure transfer fluids in dispersive use but closed systems	Motor and engine oils, brake fluids Also in these applications, the lubricant may be exposed to high energy conditions and chemical reactions may take place during use. Exhausted fluids need to be disposed of as waste. Repair and maintenance may lead to skin contact. Leakage during use may lead to environmental exposure.
PROC21	Low energy manipulation of substances bound in materials and/or articles	Manual cutting, rolling or assembly of material/article, possibly resulting in the release of fibres or rubber fumes;
PROC22	Potentially closed processing operations (with minerals) at elevated temperature	Activities at smelters, furnaces, refineries, coke ovens. Exposure related to dust and fumes to be expected. Emission from direct cooling may be relevant.

Descriptor for process categories [PROC]		
	Process categories based on TRA categories for workers⁹;	Examples and explanations
PROC23	Open processing and transfer operations (with minerals) at elevated temperature	Sand and die casting, tapping and casting melted solids, raking melted solids paving; Exposure related to dust and fumes to be expected. Emission from direct cooling may be relevant.
PROC24	High (mechanical) energy work-up of substances bound in materials and/or articles	Substantial thermal or kinetic energy applied to substance by grinding, mechanical cutting, drilling or sanding. Release of solids (dust) or fumes to be expected
PROC25	Hot work operations with metals	Welding, soldering, gouging, brazing, flame cutting Exposure due to the release of fumes to be expected.

Appendix R.12-4: Descriptors for substances in articles with no intended release

Use Descriptors for substances in articles with no intended release - Article categories [AC]	
AC 0	Other Articles (use TARIC terminology: see last row) ¹⁰
AC 1-1	Passenger cars and motor cycles
AC 1-2	Other vehicles: Railway, aircraft, vessels, boats, trucks, and associated transport equipment
AC 2	Machinery and mechanical appliances thereof
AC 3-1	Electrical and electronic products, e.g. computers, office equipment, video and audio recording, communication equipment
AC 3-2	Electrical batteries and accumulators
AC 3-3	Electrical and electronic products: Household appliances (white ware)
AC 3-4	Photographic and reprographic articles: cameras, video cameras
AC 4	Glass and ceramic products: dinner ware, pots, pans, food storage containers
AC 5-1	Fabrics, textiles and apparel: bedding and clothing
AC 5-2	Fabrics, textiles and apparel: curtains, upholstery, carpeting/flooring, rugs,
AC 6	Leather products: apparel and upholstery
AC 7-1	Metal products: cutlery, cooking utensils, pots, pans,
AC 7-2	Metal products: toys
AC 7-3	Metal products: furniture
AC 8-1	Paper products: tissue, towels, disposable dinnerware, nappies, feminine hygiene products, adult incontinence products, writing paper
AC 8-2	Paper products: newspaper, packaging
AC 9	Photographic and reprographic articles: films, printed photographs
AC 10-1	Rubber products: tyres
AC 10-2	Rubber products: flooring
AC 10-3	Rubber products: footwear
AC 10-4	Rubber products: toys
AC 10-5	Other general rubber products
AC 11-1	Wood and wood furniture: flooring
AC 11-2	Wood and wood furniture: furniture
AC 11-3	Wood and wood furniture: toys
AC 12-1	Constructional articles and building material for indoor use: wall construction material ceramic, metal, plastic and wood construction material, insulating material.
AC 12-2	Constructional articles and building material for outdoor use: wall construction material, road surface material, ceramic, metal, plastic and wood construction material, insulating material.
AC 13-1	Commercial/consumer plastic products like disposable dinner ware, food storage, food packaging, baby bottles
AC 13-2	Plastic products: Flooring
AC 13-3	Plastic products: Toys
http://ec.europa.eu/taxation_customs/dds/tarhome_en.htm	

¹⁰ to be specified in free-text field if i) the article is not covered in any of the categories or ii) the registrant wishes to describe the use of the substance manufactured into an article more specific; use the TARIC terminology in such cases.

Appendix R.12-5: Substances in articles with intended release

Use descriptor for substances in articles with intended release	
Descriptor based on an indicative list of examples	
AC30	Other articles with intended release of substances, please specify ¹¹
AC31	Scented clothes
AC32	Scented eraser
AC33	<i>Entry has been removed after the REACH CA meeting in March 2008.</i>
AC34	Scented Toys
AC35	Scented paper articles
AC36	Scented CD
AC37	Other scented articles; please specify ¹²
AC38	Packaging material for metal parts, releasing grease/corrosion inhibitors
AC39	Other articles releasing grease or corrosion inhibitors; please specify ¹³

¹¹ see previous footnote; please note that articles could also be relevant for occupational exposure, in particular abrasive materials. The process category for high (mechanical) energy work-up of substances bound in materials and articles in the list of process categories (PROC) is not yet linked to a pre-set exposure scenario and the corresponding defaults for exposure estimation. Electrodes for welding and soldering are listed under PC 38 as a preparation.

¹² to be specified in free-text field if i) the article is not covered in any of the categories or ii) the registrant wishes to describe the use of the substance manufactured into an article more specific; use the TARIC terminology in such cases.

¹³ see previous footnote;