



Nederlandse Vereniging van Zeepfabrikanten

Generic Exposure Information Sheet for Detergents

End-user Guidance for Occupational Health
(HSE) manager of industrial and institutional
cleaning companies

Dutch Detergents Association

Draft Version 3.1, November 2013

Introduction

REACH

In 2006 a new European chemical framework legislation came into force, covering the Registration, Evaluation, Authorisation and restriction of CHEMicals (REACH)¹. One of the main goals of this legislation is to increase the knowledge in the supply chain on the risks of new and existing chemicals. With this knowledge appropriate risk management measures can be taken for the safe use of chemicals – ranging from personal protection equipment to restricting the chemical from the European market.

A company producing chemical substances or processing chemical substances in mixtures has the obligation under REACH to assess the level of risks of these substances. The necessary measures relating to protection of human health and safety at workplace, and protection of the environment have to be communicated down the supply chain through the use of a Safety Data Sheet (SDS).

For hazardous substances for which a chemical safety report has been completed (not mixtures of substances) it is an obligation to provide an annex to the SDS containing information on how the substance can be used safely in all the identified uses of their customers². This includes the identified uses of products (mixtures) in which the substance is present. These annexes are called Exposure Scenarios (ES). An ES is based on a risk assessment approach taking into consideration the substance properties (e.g. boiling/flashpoint) and the way this substance is used including the product properties (e.g. physical state), the operational conditions (e.g. duration) and the risk management measures. This combination determines if use is considered “safe” (Figure 1)



Figure 1: Safe use of a substance in accordance with an Exposure Scenario

¹ EC 1907/2006

² REACH Art. 14

If the operational conditions during the use of a substance with hazardous properties cannot be considered as safe, suitable risk management measures have to be prescribed. These may include, for instance, Local Exhaust Ventilation (LEV) or personal protection equipment like gloves, dust cap or safety goggles.

Formulators of mixtures (e.g. detergents, paints) do not have an obligation under REACH to compile an ES to attach to the SDS of their products. They do however have the obligation to evaluate the Exposure Scenarios of the individual substances in the mixture for the safe use of that mixture. The results of this evaluation (e.g. wearing gloves for certain uses of the mixture) have to be communicated down the supply chain, so that the end-user knows how to safely use the product.

The way of communicating this information is not specified under REACH. Therefore, relevant use information may be communicated in many different formats from different suppliers, which further complicates understanding the information by the end user. In the detergents industry, the fact that many products are diluted before use is also an important aspect that has to be considered. Harmonization and standardization of this communication would therefore be of significant importance in helping the end user understanding the important use information. The Generic Exposure Information Sheet (GEIS) is a proposed solution to communicate in a standardized and harmonized way uses information of the product in a sheet accompanying the SDS.

Use descriptors

A very important aspect in this solution is the mapping of uses of products within a market sector. To support this mapping procedure, the European Chemicals Agency (ECHA) has developed the use descriptor system³. The use descriptor system is based on five separate descriptor-lists which in combination with each other form a brief description of use:

- The sector of use category (SU) describes in which sector the substance is used. This includes mixing or re-packing of substances at formulator's level as well as industrial, professional and consumer end-uses.
- The chemical product category (PC) describes in which types of chemical products (= substances as such or in mixtures) the substance is finally contained when it is supplied to end-uses (by industrial, professional or consumer users).
- The process category (PROC) describes the application techniques or process types defined from the occupational perspective.
- The environmental release category (ERC) describes the broad conditions of use from the environmental perspective.
- The article category (AC) describes the type of article into which the substance has eventually been processed. This also includes mixtures in their dried or cured form (e.g. dried printing ink in newspapers; dried coatings on various surfaces).

³ Guidance on information requirements and chemical safety assessment. Chapter R.12: Use descriptor system (Version 2.0, March 2010)

Contributing Scenario's

For the detergents and maintenance products industry the European association of this sector (A.I.S.E.) has further elaborated this system. All industrial, professional and consumer uses of products in the detergents sector were analysed and evaluated following the use descriptors as mentioned above. More specific ERCs (SpERCs) were formulated to better suit the environmental release situation for these products. Next, the A.I.S.E. combined the analysed use information and use descriptors into Contributing Scenarios (CS) for Professional (Institutional) – CSP and Industrial uses - CSI. This resulted in fourteen CSPs and ten CSIs, which also include uses of the diluted product⁴.

The following data has been included for each specific CS:

- short description of the process or activity
- relevant use descriptors
- duration of the process per day;
- use indoors or outdoors (ventilation);
- presence of LEV
- use of risk management measures (e.g. personal protection equipment); and
- maximum concentration of main ingredients (e.g. surfactants, solvents, base/acid).

The CS therefore describe the conditions of use of institutional and industrial cleaning professionals and were communicated to many suppliers of our sector to cover these in the exposure scenarios of their substances. The format of the Contributing Scenario is aligned with the ECETOC TRA tool, a tier 1 exposure modelling tool used to assess human health risks.

⁴ A.I.S.E. Use Mapping tables: http://www.aise.eu/reach/?page=exposureass_sub2

Method Contributing Scenarios

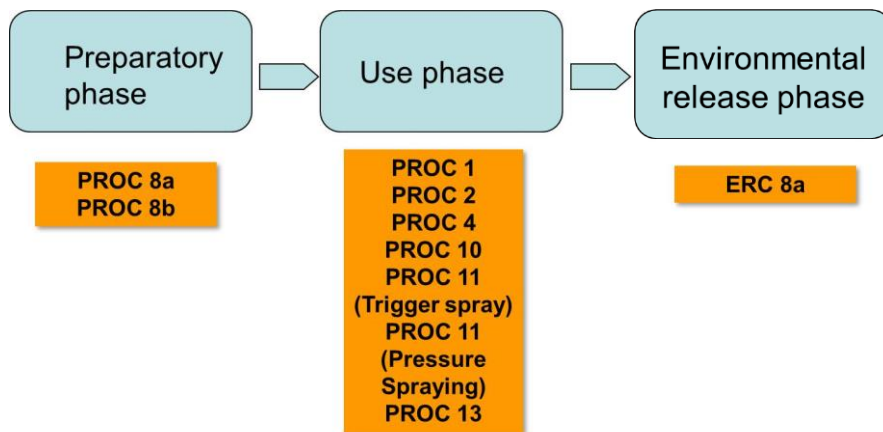


Figure 2: phases of a typical professional cleaning process

Figure 2 shows the three phases for a typical cleaning process. First there is the preparatory phase in which the product is transferred in for instance a machine, bucket, or cleaning equipment. Important in this phase is that the undiluted product is used. Process categories of this phase include PROC 8a and 8b (see Annex I). Often, the product is strongly diluted during this phase for the use phase.

In the use phase the (mostly diluted) products are used to clean; for instance to spray the product on a surface and brushing it with a cloth. During the use phase, several PROCs can be applicable (for more details regarding the PROC definition see Annex I). Since the product in this phase is often strongly diluted, the risk management measures as communicated in the SDS of the product have changed. Figure 3a describes the difference in (average) maximum ingredient concentrations during the different phases to illustrate this fact. A product that is classified as irritant will generally lose that classification once it is diluted. Personal protection equipment (PPE) prescribed in the SDS for the undiluted product can thus be not relevant anymore for the use phase.



Figure 3a: Example of a cleaning product: Maximum concentration of the ingredients (in weight percentage) during the preparatory and use phases, specified by ingredient type.

When a cleaner is at work, he is not constantly performing the same operation during his workday. Figure 3b describes the maximum duration of a PROC per phase, during a full 8 hour shift. Preparing the product for the use phase, like dilution, usually takes only a few minutes – not longer than a total of 50 minutes per day. The actual spraying in PROC 11 (Trigger or high pressure spraying) of a cleaning product only takes up to 50 minutes per day as well; other PROCs may be performed up to 8 hours.

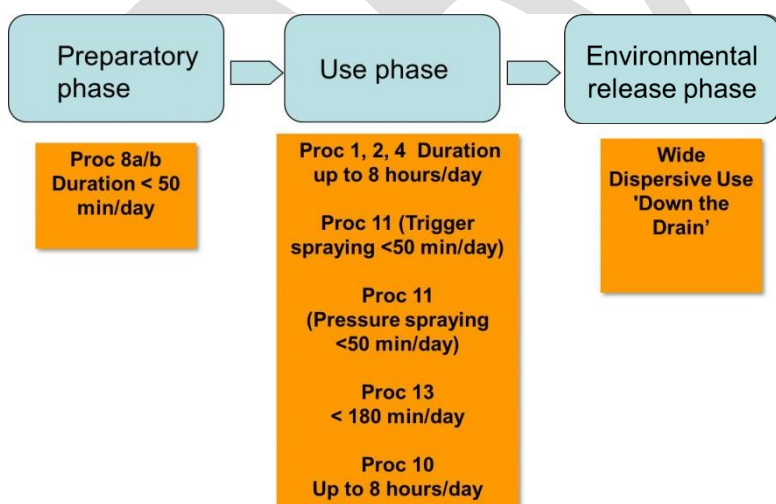


Figure 3b: Maximum duration of a process (PROC) during cleaning (per day).

Cleaning is usually performed inside. Often, no active ventilation (Local Exhaust Ventilation, LEV) is present where the cleaning operations are performed. Ventilation as may be prescribed in the SDS of a cleaning product may include opening a door or window, which leads to a natural renewal of the

air (in general 50%). This ventilation of the work space is a way to reduce the cleaning product exposure for the cleaner. Other exposure-reducing methods can be found in personal protection equipment, for instance: gloves, safety goggles or respiratory masks. These methods are generally only used in the preparation phase or PROCs in which the undiluted product is used. The possible RMMs per phase are shown in Figure 3c.

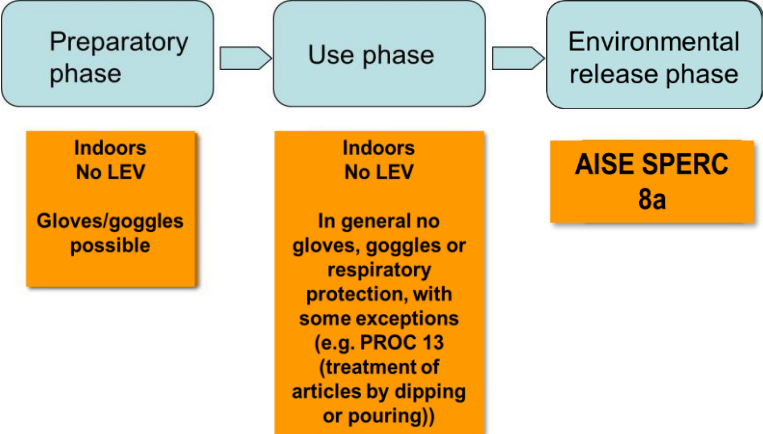


Figure 3c: Possible Risk Management Measures in each phase.

The 14 Contributing Scenarios for professional (institutional) uses are the result of combining carefully assessed operational conditions as described in this chapter. Figure 4 shows these CSPs, a short description of the scenario and their specific use descriptors.

Contributing Scenario-Code	Short description of process or activity	Sector of use (SU)	Process Category (PROC)	Product category (PC)	ERC	SPERC
AISE_CSP01	Transfer of professional cleaning or maintenance product (charging/discharging) to a cleaning equipment (machine/vessel/bucket)	SU22	PROC8a	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP02	Transfer of professional cleaning or maintenance product (charging/discharging) to a dedicated cleaning equipment	SU22	PROC8b	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP03	Trigger spraying of a professional cleaning or maintenance product during short time.	SU22	PROC 11	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP04	Spraying of a professional cleaning or maintenance product (indoor and outdoor)	SU22	PROC11	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP05	Using a diluted professional cleaning solution or maintenance product in a closed cleaning equipment	SU22	PROC1	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP06	Using a diluted professional cleaning solution in a semi closed cleaning equipment	SU22	PROC2	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP07	Using a diluted professional cleaning solution or maintenance product in a cleaning equipment; opportunity for exposure arises	SU22	PROC4	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP08	Brushing a diluted professional cleaning solution, disinfectant or maintenance product	SU22	PROC10	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP09	Brushing a professional cleaning or maintenance product after trigger spraying	SU22	PROC10	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP10	Brushing a concentrated professional cleaning or maintenance product.	SU22	PROC10	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP11	Treatment of articles by dipping or pouring with a professional cleaning or maintenance products	SU22	PROC13	PC35	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP12	Professional Use of Drain Unblockers	SU22	PROC13	PC35	ERC 8a	AISE SPERC 8a.1.a.v2
AISE_CSP13	Laboratory use of Cleaning and Maintenance products	SU22	PROC15	PC21	ERC8a	AISE SPERC 8a.1.a.v2
AISE_CSP14	Low-pressure foam spraying of professional cleaning products (indoor)	SU22	PROC11	PC35	ERC8a	AISE SPERC 8a.1.a.v2

Figure 4: Contributing Scenarios for professional (institutional) use (CSPs) and their specific use descriptors.

Finally, to determine daily exposure of cleaners to cleaning products, it is important to know how long he or she generally performs these scenarios in a normal working day and which RMMs are taken. The general conditions in each scenario was carefully assessed by the A.I.S.E. The results can be seen in Figure 5.

Contributing Scenario-Code	Exposure Modifier				RMM		
	Duration per day	Outdoor	Indoor with LEV	Indoor without LEV	Respiratory Protection	Eye protection (goggles)	protection of hands (gloves)
AISE_CSP01	50	Yes*	No	Yes	No	Yes	Yes
AISE_CSP02	40	No	No	Yes	No	Yes	Yes
AISE_CSP03	40	No	No	Yes	No	No	No
AISE_CSP04	50	Yes*	No	Yes	No	Yes	Yes
AISE_CSP05	480	No	No	Yes	No	No	No
AISE_CSP06	480	No	No	Yes	No	No	No
AISE_CSP07	480	No	No	Yes	No	No	No
AISE_CSP08	480	No	No	Yes	No	No	No
AISE_CSP09	220	No	No	Yes	No	No	No
AISE_CSP10	120	No	No	Yes	No	Yes	Yes
AISE_CSP11	60	No	No	Yes	No	Yes	Yes
AISE_CSP12	10	No	No	Yes	No	Yes	Yes
AISE_CSP13	40	No	No	Yes	No	Yes	Yes
AISE_CSP14	50	No	No	Yes	No	Yes	Yes

Figure 5: Maximum duration of the scenario and the possible Risk Management Measures.

The combined information forms the Contributing Scenarios for Professional use⁵. The information in these CSPs is communicated to the suppliers of raw materials in this sector. As an obligation under REACH, these specific uses of the raw materials must be evaluated and communicated in the Exposure Scenario. This ensures that the use of cleaning products containing these raw materials is safe, as long as the OCs and RMMs are followed.

The information was collected considering the current state of the technical progress. A.I.S.E. and national associations will make sure the data remains up-to-date.

⁵ Available on the AISE website: http://www.aise.eu/reach/?page=exposureass_sub2

Obligations of formulators

As mentioned in the introduction, formulators of mixtures have the obligation to analyse the information from the suppliers of their raw materials and adequately communicate them down the supply chain. In order to fulfil this REACH obligation, formulators have to perform the following steps for each of their products.

When applicable, they first have to check whether the SDSs of the raw materials contain Exposure Scenarios. This is the case for those substances which have been registered under REACH. It is the duty of a formulator to check whether both his uses of the substance and his customers' uses are included in the ES. If no Exposure Scenario is included, it is still necessary to ensure that the identified uses of a substance are safe – in that case, the formulator has to evaluate that from the available information on the substance.

In the case of professional (institutional) cleaning, the identified uses of the end users are the relevant CSPs of the substance. If the relevant operational conditions as described in the CSPs are not included in the ES, the formulator has three options: communicate the CSPs to the suppliers so they can include those uses in their chemical safety assessments, make a Downstream User (DU) assessment to cover those uses himself, or use other suppliers/other raw materials that have included the relevant uses.

If the relevant operational conditions as described in the CSPs are included in the ESs of the used raw materials, the formulator checks below what concentration the CSP use is safe, and makes sure that the raw material is below that concentration in the mixture. If this is the case, the cleaning product can be safely used for the relevant CSPs. If personal protection equipment has to be used for one or more CSPs, the formulator has to analyse the approved types of PPE (i.e. which material) that are stated in each of the raw material ESs. He then decides which of the approved types are relevant for his customers, and includes those types in Chapter 8 of the SDS of the product.

If this analysis is performed, the formulator has to communicate the approved uses (CSPs) through the SDS of the product. According to ECHAs Guidance for Downstream Users, the formulator can choose the most appropriate means to include the information. To do so, he has the following options⁶:

1. integrate the information into the main body of the SDS; or
2. append safe use information for the mixture; or
3. attach relevant exposure scenarios for the substances in the mixture in an annex.

The formulator can select the most effective method or provide information in different ways to different customer groups as appropriate. The process should be as efficient as possible, proportionate to the risk, and relevant and understandable to the recipients.

The first option of integrating the information into the main body of the SDS is difficult in the case of the institutional detergents sector. As mentioned before, most products are diluted before the actual use by the cleaner. The principle of the SDS is that it states the information of the product (including safe use information) as it is delivered to the customer – the undiluted product. Moreover, the

⁶ ECHAs Guidance for Downstream Users, Draft Version 2.0, September 2013

information should be 'relevant and understandable' to the recipients – including information on safe use of the diluted product does not enhance the readability of the SDS. The same goes for the third option - exposure scenario's of substances contain extensive and often detailed information on the exposure situation of identified uses, for which a certain level of knowledge on toxicology and exposures is needed to properly read. The most suitable option for end users of institutional cleaning products is therefore option 2: appending safe use information on the mixture to the SDS of the product.

Exceptions

Although the fourteen CSPs cover almost all uses in the institutional detergents industry, it may occur that certain specialized cleaning processes are not covered. In these cases, the information from the CSPs is not sufficient to determine safe use of a cleaning product. This identified use must always be communicated upstream in the supply chain, so that the raw material supplier can include it in their chemical safety assessment. If this somehow does not happen, the formulator of the product or the downstream (end) user himself may do the assessment for that use, and has to communicate this to ECHA. If formulators perform this assessment, they are recommended to keep clearly and specifically mention that this is a specialized use that does not fall under any of the standardized uses (CSPs), and state the necessary risk management measures that have to be taken to ensure safe use. When national associations or the A.I.S.E. ascertain that this use is more widely used throughout the detergents industry, they will consider to extend the CSP with a new standardized use and communicate this use to raw material suppliers as well.

Structure of a GEIS

The information from the Contributing Scenarios is summarized in a fixed format – the GEIS. Fourteen GEIS were developed for each of the fourteen CSPs. Each of these GEIS contains the (non-product-specific) conditions of that CSP use. If a formulator has assessed which CSPs are relevant and safe, he will mention those CSP codes (for instance: CSP01, CSP03 and CSP09) in Section 1 of the SDS, where identified (safe) uses have to be included. The conditions for using the product within the boundaries of those CSPs are stated in the GEIS of those CSPs.

Because each GEIS is generic and does not change with different products, it is not necessary to append the relevant GEIS to the SDS of all products every time. The formulator has to make sure that the customers receive all GEIS documents and the appropriate instructions on how to use and read a GEIS (for instance through this guidance). When that customer receives an SDS which states CSP codes in Section 1, he then knows which GEIS documents to consider for that product.

Two GEIS examples are given in Annex II. The following information can be found in each GEIS:

- Title explaining the type of use;
- An explanation of the steps the formulator has taken to ensure safe use;
- Relevant use descriptors;
- Properties of the product composition;
- Environmental measures;

- Operational conditions;
- Risk management measures; and
- Good practice advice.

Employer obligations

According to the national occupational health legislation, an employer has to identify and evaluate all risks his employees are exposed to during their day-to-day work, and make sure the employees have the appropriate information and equipment to work safely. With regards to the products cleaners use during a work day, the employer has to provide workplace instructions that describe how to work safely with cleaning products, in such a way that the employee understands the instructions clearly. These instructions therefore have to be attuned to the situation (the workplace) and the employees.

The combination of a product SDS and the relevant GEISs provides all the information the employer needs to create workplace instructions for his employees. If the employer can make sure that all employees working with a cleaning product work within the conditions of the GEIS, he has properly fulfilled the obligation to assess, evaluate and manage the risks of working with that cleaning product⁷.

⁷ Note: this does not include working with machines or equipment used while working with the cleaning product – this only ensures that exposure to the (possibly dangerous) substances in the product are low enough to manage the possible risks.

Annex I: PROC's relevant for the Institutional cleaning sector

	Process category	Examples and explanations
PROC 1	Use in closed process, no likelihood of exposure	Use of the substances in high integrity contained system where little potential exists for exposures, e.g. any sampling via closed loop systems.
PROC 2	Use in closed, continuous process with occasional controlled exposure	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 breakages.
PROC 4	Use in batch and other process (synthesis) where opportunity for exposure arises	Use in batch manufacture of a chemical where significant opportunity for exposure arises, e.g. during charging, sampling or discharge of material, and when the nature of the design is likely to result in exposure.
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities	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.
PROC 8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities	Sampling, loading, filling, transfer, dumping, bagging in dedicated facilities. Exposure related to dust, vapour, aerosols or spillage, and cleaning of equipment to be expected.
PROC 10	Roller application or brushing	Low energy spreading of e.g. coatings. Including cleaning of surfaces. Substance can be inhaled as vapours, skin contact can occur through droplets, splashes, working with wipes and handling of treated surfaces.
PROC 11	Non industrial spraying	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.
PROC 13	Treatment of articles by dipping and pouring	Immersion operations. 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 such as dipping the article into a bath or pouring a preparation onto a surface.
PROC 15	Use as laboratory reagent	Use of substances at small scale laboratory (< 1 l or 1 kg present at workplace). Larger laboratories and R+D installations should be treated as industrial processes.

Annex II: Examples GEIS



Nederlandse Vereniging van Zeepfabrikanten

GEIS: CSP01

Version: 3.1, October 2013

Transfer of professional cleaning or maintenance product (charging/discharging) to cleaning equipment (machine/vessel/bucket)

Formulators have the obligation under REACH to evaluate the safe use information on raw materials that they receive, and using that information communicate the safe use conditions of their mixtures to their customers.

If a GEIS CSP code is mentioned in Section 1 of the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the GEIS CSP documents is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier of a dangerous substance, the formulator has ensured the safe use of that substance in the mixture himself.


This is a generic document. When composing work instructions for cleaning- or maintenance products for your employees, always use this document in combination with the SDS of the product.



Use descriptors	
SU 22	Professional use
PC 35	Washing and cleaning product
PROC 8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
ERC 8a	Wide dispersive indoor use of processing aids in open systems
AISE SpERC 8a.1.a.v1	Wide dispersive use in "Down the drain" cleaning and maintenance products. Wastewater should be treated by a municipal STP in accordance with this SPERC

Properties of product composition
In Section 2 of the SDS of products and on the label, the classification of the product is provided. CSP01 is based on the undiluted product.
The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.
Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.
This product may contain sensitizing ingredients, that may cause an allergic reaction in certain people. Section 15 of the SDS states these ingredients, when applicable to the product.

Environmental measures	
Prevent that the product directly reaches surface waters.	

Operational conditions	
Maximum duration	50 minutes per day
Process conditions	Process should be carried out at room temperature
	In case of dilution, tap water at a maximum temperature of 45 degrees Celcius should be used
	No LEV needed; good general ventilation at workplace is sufficient

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	Use gloves and safety goggles. See chapter 8 of the SDS of this product for specifications.
	
	Training of the worker in relation to proper use and maintenance of the PPE must be ensured.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet.
	Use good occupational hygiene practices as specified in section 7 of the SDS of the used product.
	Avoid splashing. If splashing cannot be avoided, use protective clothing.



Nederlandse Vereniging van Zeeplafabrikanten

GEIS: CSP03

Version: 3.1, October 2013

Trigger spraying of a professional cleaning or maintenance product during short periods of time

Formulators have the obligation under REACH to evaluate the safe use information on raw materials that they receive, and using that information communicate the safe use conditions of their mixtures to their customers.

If a GEIS CSP code is mentioned in Section 1 of the SDS of a product, the formulator of that product declares that all substances in the mixture are present in such concentration, that the use of the product within the conditions of the GEIS CSP documents is safe. When available, this safe use is ensured by evaluating the results of the chemical safety assessments as performed by the raw material suppliers. When no chemical safety assessment has been carried out by the supplier of a dangerous substance, the formulator has ensured the safe use of that substance in the mixture himself.

This is a generic document. When composing work instructions for cleaning- or maintenance products for your employees, always use this document in combination with the SDS of the product.



Use descriptors	
SU 22	Professional use
PC 35	Washing and cleaning product
PROC 11	Non industrial spraying
ERC 8a	Wide dispersive indoor use of processing aids in open systems
AISE SpERC 8a.1.a.v1	Wide dispersive use in "Down the drain" cleaning and maintenance products. Wastewater should be treated by a municipal STP in accordance with this SPERC

Properties of product composition
In Section 2 of the SDS of products and on the label, the classification of the undiluted product is provided. CSP03 is based on a diluted product.
The classification of a product is based on the classified ingredients in the products. All ingredients contributing to the classification of the mixture are mentioned in Section 3 of the SDS.
Relevant limit values of the ingredients on which the exposure assessment is based, are stated in Section 8 of the SDS.
This product may contain sensitizing ingredients, that may cause an allergic reaction in certain people. Section 15 of the SDS states these ingredients, when applicable to the product.

Environmental measures	
Prevent that the product directly reaches surface waters.	

Operational conditions	
Maximum duration	40 minutes per day
Process conditions	Process should be carried out at room temperature No LEV needed; good general ventilation at workplace is sufficient

Risk management measures	
Conditions and measures related to personal protection equipment (PPE), hygiene and health evaluation	No PPE necessary.

Good practise advice	
Don't eat or drink, don't smoke, no open flame	
Wash hands after use Avoid contact with damaged skin Do not mix with other products	
Spillage instructions	Dilute with water and mop up.
Additional good practice advice	Follow the product instructions as specified on the label or in the product information sheet. Use good occupational hygiene practices as specified in section 7 of the SDS of the used product.