

# Development of SDS

## Downstream User workshop

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# Content

- Benefits of good communication
- Reporting uses
- Introduction to Exposure Scenarios
- Known issues

# Why communication in the supply chain is needed

## Manufacturer



Knows the properties of the substance

- Physico-chemical
- Toxicological
- Ecotoxicological

## Downstream user



Knows in detail how the substance is used

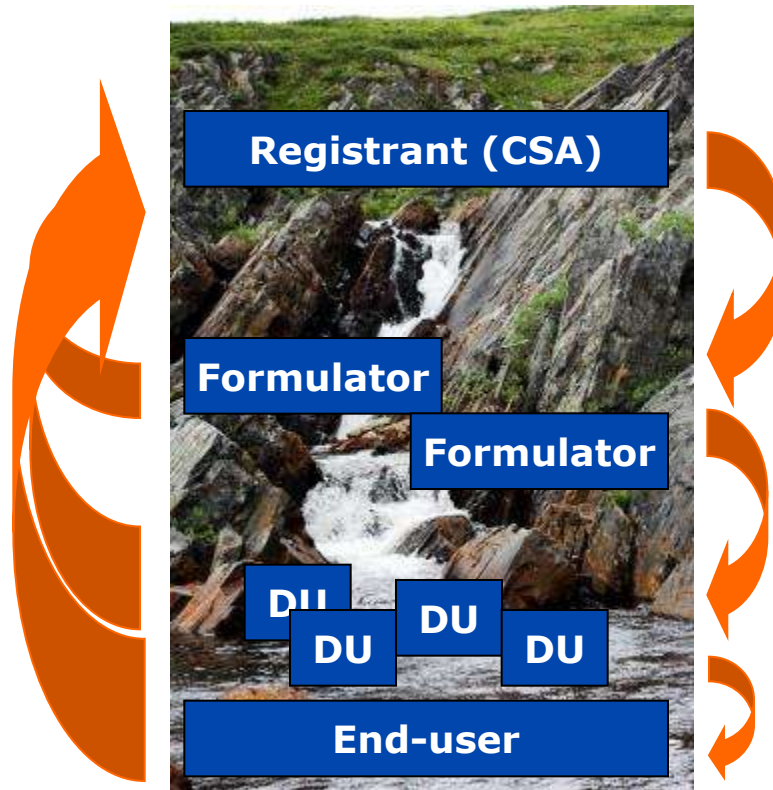
- Process steps
- Operational conditions
- Risk management measures
- Foreseen products

# The benefits of good communication

- Clear allocation of responsibilities of different actors
  - Systematic consideration of safe use by consumers
  - Downstream users can benefit from suppliers' assessments
  - Authorities get an overview
    - where communication in the supply chain does not work
    - where there are uses not covered by the registrants' CSA
- More and better information on how chemicals are used in practice

# Communication steps in the supply chain

**1. Communication of uses to the registrant**



**2. Communication on safe use to own downstream user**

**3. Communication on safe use to own downstream user**

**4. Communication on safe use to own downstream user**

# Reporting uses for the 2013 deadline



# Communicating uses for 2013 registrations

- Lesson learnt from 2010: Top-down approach recommended by industry associations
- Registrants – in cooperation with their customers - to actively communicate which uses they intend to cover
  - Intuitive, concrete description of the use
  - Use descriptors
- Sources for downstream users to check
  - Supplier's website
  - Section 1 of the current SDS
  - Other technical information from the supplier
  - Use mapping by own sector association
- List of substances intended to be registered on the ECHA website

## Communicating uses for 2013 registrations

- If use not found, substance-specific communication upstream
  1. Standardised, sector-specific description of relevant uses
  2. Relevant elements of the use descriptor system
  3. Conditions of use
- Standard formats (templates) available





**Exposure Scenario: The novel  
communication vehicle  
under REACH**



# The vehicle for communication: Extended safety data sheet



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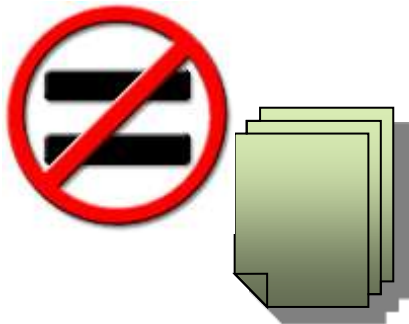
## Main body

- Classification and labelling information
- Registered uses
- Threshold values for exposure (DNEL, PNEC)
- Physicochemical data
- Toxicological and ecotoxicological data

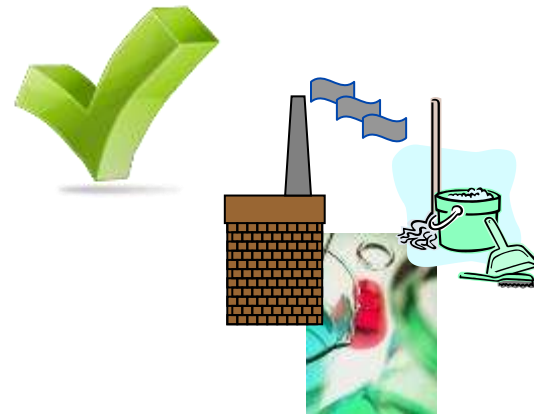
## Exposure scenarios

- Use-specific operational conditions
- Use-specific risk management measures

## Are own uses and the foreseeable uses further down the supply chain covered in the exposure scenario?



- Uses identified in ES title
- Process/tasks steps covered
- Conditions of safe use described



- Actual product category
- Actual process steps/tasks
- Actual conditions of use

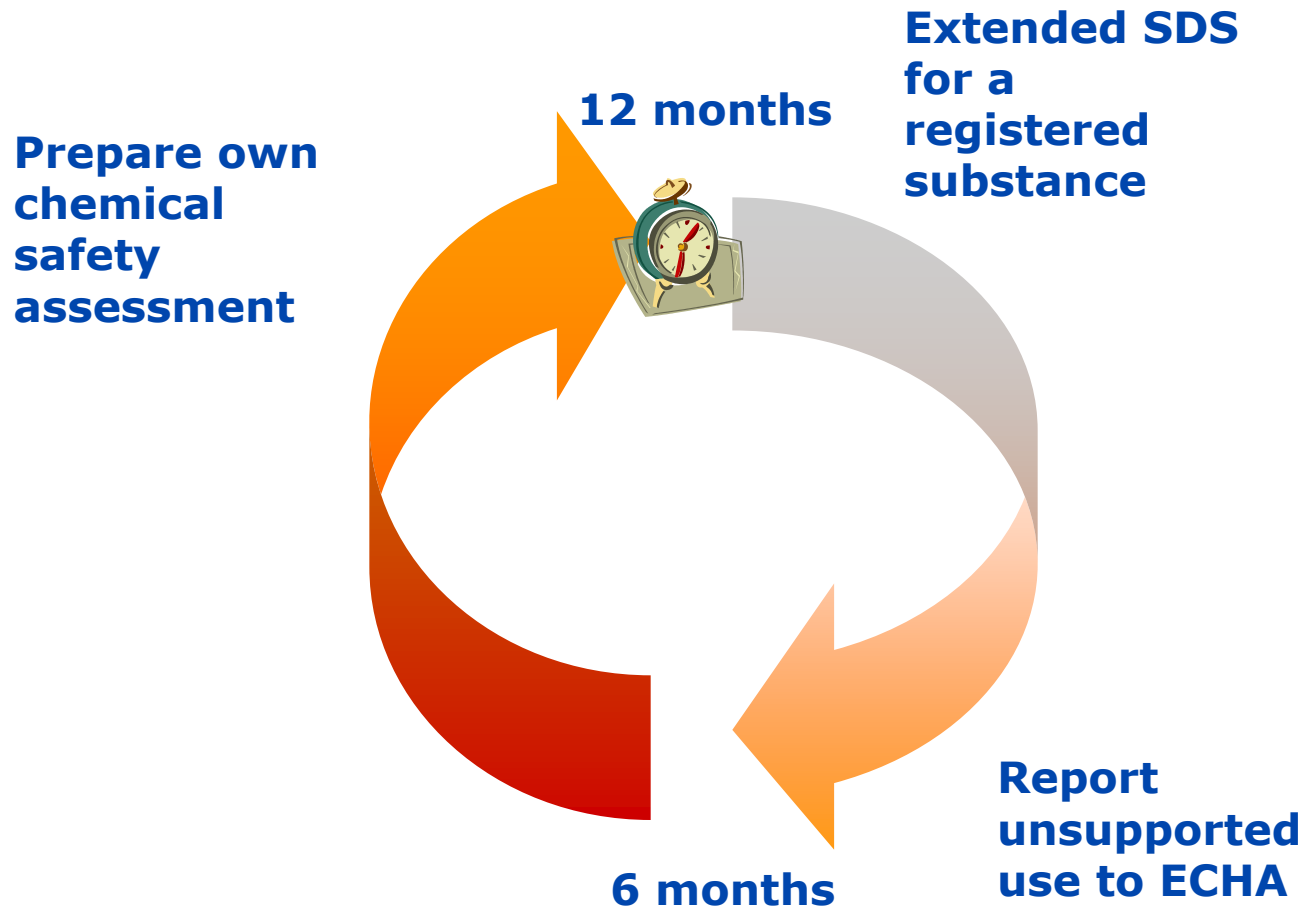
## **If use/conditions of use are covered in the supplier's exposure scenario**

- Document the outcome of your check
- Forward relevant information on uses/conditions of use to your customers (e.g. via extended SDS)
- 12 months to apply the conditions of use as in the exposure scenario

## **If use/conditions of use are not covered**

- Ask your supplier to include non supported uses/conditions of use in his chemical safety report and to make available a new exposure scenario
- Adapt your activity and/or products to the conditions of safe use described in the exposure scenarios
- Look for another supplier whose exposure scenarios cover your uses
- Stop using the substance
- Carry out your own chemical safety assessment for your specific use/conditions of use and report to ECHA

# Timelines if use not covered



# Reporting to ECHA – web-based format

## Downstream User Report

Login


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Please log in with your REACH-IT user name and password.

User ID:  [Recovery of a forgotten User ID  
\(through the main REACH-IT pages\)](#)


Password:  [Recovery of a forgotten password  
\(through the main REACH-IT pages\)](#)

Please enter the text shown below:

Unable to read the text? [Try Another](#)

[echa.europa.eu/downstream](https://echa.europa.eu/downstream)



**ECHA**  
EUROPEAN CHEMICALS AGENCY

ECHA.EUROPA.EU

# Reporting to ECHA – web-based format

Downstream User Report Creation - Microsoft Internet Explorer provided by ECHA

File Edit View Favorites Tools Help

http-reach.chemicals.ec.europa.eu

## Downstream User Report

Create and send your Downstream User Report with this form. Please note that work in progress can not be saved and returned to afterwards. Also please note that after sending your report this web page can no longer be used for viewing or correcting the information you have sent.

General Reason(s) Use(s) Use Sites Suppliers Contact Send

We wish to report our use(s) which is/are not covered in the exposure scenarios received from our supplier(s):

We intend to prepare a chemical safety report in accordance with REACH article 37(4)

We do not intend to prepare a chemical safety report relying on the following exemptions:

- We use the substance in a total quantity of less than one tonne per year and rely on the exemption in A
- We use the substance for the purposes of product and process-oriented research and development and

Further information on the reported use(s):

The particular use(s) is/are not covered in the exposure scenarios received from our supplier because we prefer

- CBI reasons
- Burdens of supply chain communications mechanism
- Other reasons(s)

The particular use(s) is/are not covered in the exposure scenarios received from our supplier although we comply

- Exposure scenario title(s) is/are inconsistent with our actual use(s)
- Our conditions of use are outside the conditions described in the exposure scenario
- Our use is advised against by supplier
- Other reasons(s)

General

Reason(s)

Use(s)

Use sites

Suppliers

Contact

Send



## **Current issues**



## Known issues under discussion

- Length and complexity of extended SDS
- Scaling
- Exposure scenarios for mixtures
- Links with other environment, health and safety legislation

## ECHA support

- ENES
  - ECHA Stakeholder Exchange Network on Exposure Scenarios
  - Brings together manufacturers/importers, downstream users and authorities
  - A platform for sharing best practise and practical solutions for making most out of the exposure scenarios
- Initiation and facilitation “Roadmap towards good quality CSR information” discussions
- [www.echa.europa.eu/downstream](http://www.echa.europa.eu/downstream)



# **Exposure scenario for chemical safety report and communication**

Example: consumer use of a substance in cleaning products



## **ES for CSR and ES for communication**

- Exposure scenario in CSR contains justifications and comments
- Exposure scenario annexed to the safety data sheet will not
- Operational conditions and risk management measures must be consistent
- Process starts with conservative screening estimation (Tier 1)

**EXPOSURE SCENARIO FOR CHEMICAL  
SAFETY REPORT AND COMMUNICATION**  
**EXAMPLE:**  
**CONSUMER USE OF A SUBSTANCE IN  
CLEANING PRODUCTS**



[echa.europa.eu/support](https://echa.europa.eu/support)

## Substance selection and properties

- Alcohol widely used as a liquid component in several cleaning products (PC 35)
- Concentration in washing and cleaning products <5%
  - Maximum level of use, 15% for a conservative exposure assessment. Two exemptions:
    - Abrasive liquid: only up to 5%
    - Carpet cleaners: up to 30%
- Volatile, readily biodegradable, water soluble and low octanol-water partition coefficient
- Classified as highly flammable (harmonised classification)
- Above 50%, as an eye irritant (self-classification)

## From toxicological and ecotoxicological information

- **Quantitative** risk assessment for long term systemic effect for both consumers and humans via de environment exposed to the substance via dermal, oral and inhalation
- **Quantitative** risk assessment for acute local effects for consumers exposed to the substance via inhalation
- **Qualitative** assessment for eye irritation to cover acute local effects via dermal exposure



## Exposure assessment and exposure scenario

- Uses are described in a life-cycle tree structure
- Structure includes different stages (up to 8)
- Washing and cleaning products (PC35) are meant to be released to air or to waste water
- Operational conditions and risk management measures related to a use is **contributing scenario**
- One or more an **exposure scenario**

## Exposure Assessment and Exposure Scenario for CSR

- All input parameters enabling calculations of exposure levels to which consumers, human via environment and environment are exposed included in the CSR:
  - **transparency** and **reproducibility**
- Determinants that reflect conditions of use and risk management measures included in the exposure scenario

- Product categories and product subcategories: key input parameters for consumer exposure estimation
- One contributing scenario per each product subcategory relevant for the assessment
- Aggregation of different product subcategories when:
  - Different product subcategories characterised by common feature
  - Possible to identify one subcategory representing the worst case
  - Condition of use of subcategory with highest exposure covers the other product subcategories
  - Aggregation case by case of contributing scenarios

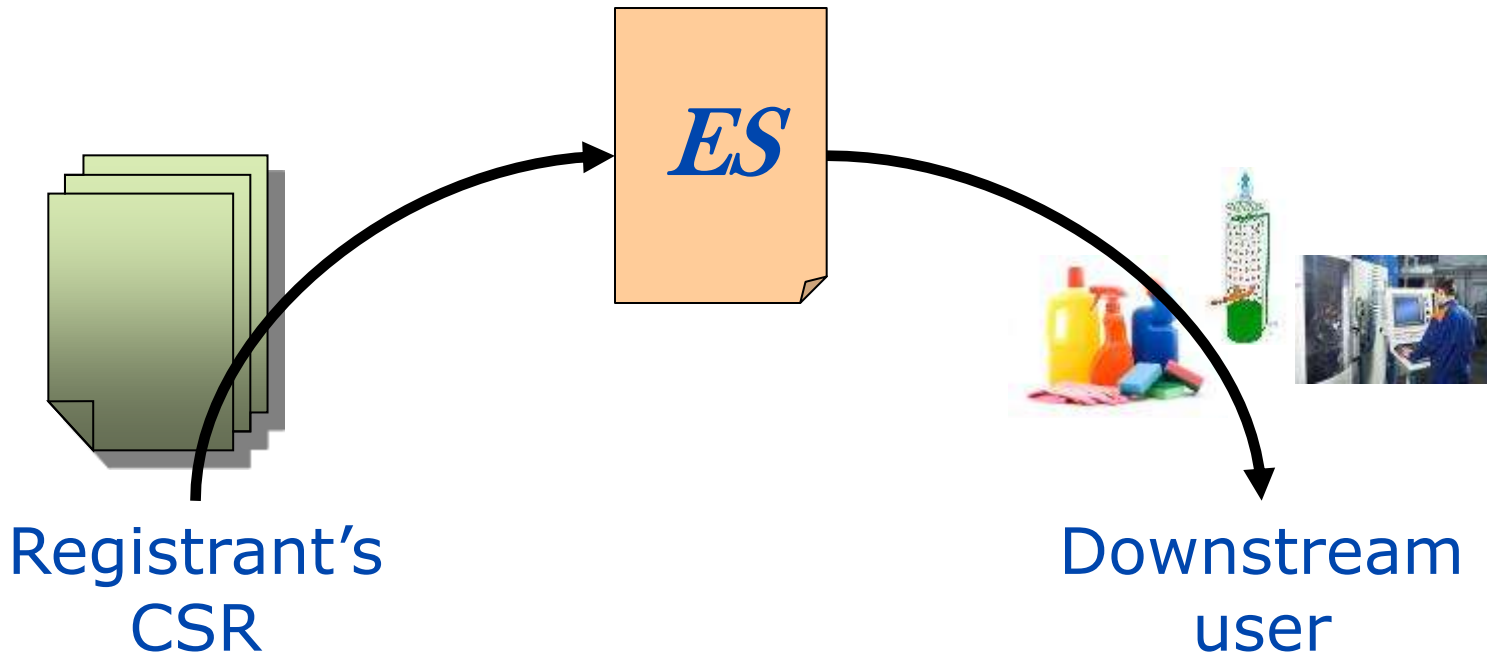
## Application of ConsExpo methodology

- RCR for inhalation short term exposure above 1 (RCR=3,9)  $\Rightarrow$  Tier 2
- Surface cleaning products (subcategory 2 for PC35 in ECETOC TRA)
- To obtain a more precise exposure estimation

- Five contributing scenarios:
  1. Laundry and dishwashing products (ECETOC TRA)
  2. Spray cleaner (ECETOC TRA)
  3. Surface cleaning product diluted before use (ConsExpo 4.1)
  4. Abrasive liquid cleaner (ECETOC TRA)
  5. Carpet cleaner (ConsExpo 4.1)

- Use of carpet cleaner evaluated separately. Covers a special use:
  - High volume
  - High quantity
- Different tasks with same product subcategory merged for exposure assessment:
  - Reduce the granularity of relevant contributing scenario
- Exposure via the oral route not relevant factor

# Exposure scenarios for communication



## Sections of the ES (1) Title section

Is this Exposure Scenario relevant for me?  
(DU)





## Sections of the ES (2) OC and RMM

- Ensures safe use of the substance
- Information presented in a structured way: sorted out under headings consistent with ES in the CSR
- A company producing consumer products should be able to establish whether:
  - Design and use are in line with assumptions of registrant
  - Generic assumptions are valid
  - Whether registrant's assumptions impact technical instruction or behavioural advice to consumers

## **Sections of the ES (3)**

### **Summary of registrant's exposure estimation and risk characterisation**

- Key values from the exposure estimates and risk characterisation
- Include methods used

## **Sections of the ES (4) Need for recalculation**

Opportunity to provide info ⇒ DU can  
recalculate exposures for specific  
conditions of use and scaling

## Appendix - ES for CSR

- Exposure scenarios describing
  - Conditions of Use
  - Exposure Estimations
  - Risk characterisationreported in sections 9 and 10 of the CSR
- 9.0.1 General tables showing uses and exposure scenarios
- 9.0.2 Reports the scope and type of exposure assessment
- 9.1.1.x Contributing scenarios (first environment, then consumers)
  - Add detail to uses and tasks
  - Determinant linked to route of exposure and type of effect

## Appendix - ES for CSR

9.1.2.x Provides exposure estimation for each contributing scenario:

- Exposure estimation
- Exposure assessment tools
- Other remarks:
  - Model assumptions
  - Detailed information on source of exposure concentration or dose

## Appendix - ES for CSR

### 10.1.1 Risk characterisation for human health for each contributing scenario

- Risk characterisation ratio for each route and type of effect
- Justifications for qualitative risk assessment
- Combined risk:
  - exposure via different routes
  - man via the environment contribution

# **9. EXPOSURE ASSESSMENT**

## **9.0. General information**

### **9.0.1. Overview of exposure scenarios and uses**

Table 1. Overview of exposure scenarios (ES) described in sections 9.1ff.

ES number	Exposure scenario name	Manufacture / Use / Subsequent service life	Stage No. *)
1	Consumer use of alcohol in washing and cleaning product	Consumer use of alcohol in washing and cleaning product - Consumer use of laundry and dishwashing product - Consumer use of trigger spray cleaner products - Consumer use of liquid cleaning product for manual surface application - Consumer use of abrasive product for manual surface application - Consumer use of liquid cleaner for cleaning carpet	C-1
*) A stage number consists of an abbreviation of the main life cycle stage followed by a consecutive number.  Manufacture: M-#, Formulation: F-#, Industrial end use: IW-#, Professional end use: PW-#, Consumer end use: C-#, Service life (by workers in industrial settings): SL-IW-#, Service life (by professional workers): SL-PW-#, Service life (by consumers): SL-C-#.			

Table 2. Overview of uses broken down by life cycle stages and the exposure scenarios (ES) described in sections 9.1ff.

Main life cycle stage	Stage No. *)	Manufacture / Use / Subsequent service life	Related subsequent service life	Market sector	Tonnage (tonnes per year)	ES No.
		Manufacture/Import - 40000.0 tonnes/year			40000.0	
Consumer end use	C-1 (IUC-1)	Consumer use of alcohol in washing and cleaning product (ERC 8a) - Consumer use of laundry and dishwashing product (PC 35) - Consumer use of trigger spray cleaner products (PC 35) - Consumer use of liquid cleaning product for manual surface application (PC 35) - Consumer use of abrasive product for manual surface application (PC 35) - Consumer use of liquid cleaner for cleaning carpet (PC 35)			40000.0	1
*) A stage number consists of an abbreviation of the main life cycle stage followed by a consecutive number.  Manufacture: M-#, Formulation: F-#, Industrial end use: IW-#, Professional end use: PW-#, Consumer end use: C-#, Service life (by workers in industrial settings): SL-IW-#						



## 9.0.2. Scope and type of exposure assessment

### 9.0.2.1. Environment

Table 3. Scope and type of exposure assessment based on hazard assessment

Protection target	Type of assessment	Explanation / Justification
Water: Fresh Water (Pelagic)	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Water: Fresh Water (Sediment)	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Water: Marine Water (Pelagic)	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Water: Marine Water (Sediment)	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Water: Fresh Water Food Chain (Predators)	Exposure assessment and risk characterisation not required	No potential for bioaccumulation
Water: Marine Water Food Chain (Predators)	Exposure assessment and risk characterisation not required	No potential for bioaccumulation
Water: Marine Water Food Chain (Top Predators)	Exposure assessment and risk characterisation not required	No potential for bioaccumulation
Water: Sewage Treatment Plant (Effluent)	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Air	Quantitative exposure assessment	
Soil: Agricultural Soil	Quantitative	Quantitative exposure assessment (EUSES 2.1) and risk characterisation
Soil: Terrestrial Food Chain (Predators)	Exposure assessment and risk characterisation not required	No PNEC oral because no potential for bioaccumulation

## 9.0.2 Scope and type of exposure assessment

The substance has no potential for bioaccumulation therefore:

- No exposure assessment and risk characterisation for the following:
  - Water: fresh water food chain (predators)
  - Marine water food chain (predators and top predators)
  - Soil: terrestrial food chain (predators)

#### 9.0.2.2. Consumer

Table 4. Scope and type of exposure assessment based on hazard assessment

Route of exposure and type of effects	Type of assessment	Explanation / Justification
Inhalation: Acute, Local	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2. <sup>25</sup>
Inhalation: Acute, Systemic	Exposure assessment and risk characterisation not required	No hazard identified for acute systemic effects (all routes).
Inhalation: Long term, Local	Exposure assessment and risk characterisation not required	No hazard identified for long term local effects (all routes).
Inhalation: Long term, Systemic	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2.
Dermal: Acute, Local	Qualitative risk characterisation with quantitative exposure assessment where applicable	No-threshold effect and/or no dose-response information available
Dermal: Acute, Systemic	Exposure assessment and risk characterisation not required	No hazard identified for acute systemic effects (all routes).
Dermal: Long term, Local	Exposure assessment and risk characterisation not required	No hazard identified for long term local effects (all routes).
Dermal: Long term, Systemic	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2.
Oral: Acute, Systemic	Exposure assessment and risk characterisation not required	No hazard identified for acute systemic effects (all routes).
Oral: Long term, Systemic	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2.

## 9.0.2.2 Consumer

No hazard for acute systemic effects ⇒ no EA and RC for inhalation-derma-oral, acute, systemic

No hazard for long term local effects ⇒ no EA and RC for inhalation-dermal, long term, local

No-threshold effect and/or no dose-response information available ⇒ Qualitative RC with Quantitative EA where applicable

### 9.0.2.3. Man via environment

**Table 5. Scope and type of exposure assessment based on hazard assessment**

Route of exposure and type of effects	Type of assessment	Explanation / Justification
Inhalation: Long term, Systemic	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2.
Oral: Long term, Systemic	Quantitative	Quantitative exposure assessment and risk characterisation. See DNEL in section 5.11.2.

## 9.1 Consumer use of alcohol in washing and cleaning products

- Environment:
  - Use in cleaning product and processing aids: ERC 8a
- Consumer: (PC 35 for all)
  - Use of laundry and dishwashing product
  - Use of trigger spray cleaner products
  - Use of liquid cleaning product for manual surface application
  - Use of abrasive product for manual surface application
  - Use of liquid cleaner for cleaning carpet

### 9.1.1. Exposure scenario

#### 9.1.1.1. Control of environmental exposure: Use in cleaning product as processing aids

Product characteristics
Amounts used
<ul style="list-style-type: none"> <li>Daily wide dispersive use: = 0.022 tonnes/day</li> </ul>
Frequency and duration of use
Environment factors not influenced by risk management
<ul style="list-style-type: none"> <li>Receiving surface water flow rate: <math>\geq 1.8E4 \text{ m}^3/\text{d}</math></li> </ul>
Other given operational conditions affecting environmental exposure
Conditions and measures related to municipal sewage treatment plant
<ul style="list-style-type: none"> <li>Municipal STP: Yes [Effectiveness Water: 87.4%]</li> <li>Discharge rate of STP: <math>\geq 2E3 \text{ m}^3/\text{d}</math></li> <li>Application of the STP sludge on agricultural soil: Yes</li> </ul>
Conditions and measures related to external treatment of waste for disposal
Conditions and measures related to external recovery of waste
Additional good practice advice beyond the REACH CSA

Further specification: Covers use of washing product for both automated/machine and manual application according to ECETOC TRA product sub category 1

	Inhal*)		Derm*)		Oral*)	
	Loc	Sys	Loc	Sys	Loc	Sys
<b>Product characteristic</b>						
<ul style="list-style-type: none"> <li>Concentration of the substance in the product: &lt; 50% Substance not classified for eye irritancy below above mentioned concentration</li> </ul>			A			
<ul style="list-style-type: none"> <li>Concentration of the substance in the product: &lt; 15 %<sup>26</sup> Source: Market data</li> </ul>	A	L		L		L
<b>Amounts used</b>						
<ul style="list-style-type: none"> <li>Product amount per task: = 50 grams Source: Default ECETOC TRA for Sub Product "Laundry and dishwashing"</li> </ul>	A	L				
<ul style="list-style-type: none"> <li>Dilution of the product before application: = 1 times ECETOC TRA assumes exposure to undiluted product</li> </ul>	A	L		L		L
<b>Frequency and duration of use/exposure</b>						
<ul style="list-style-type: none"> <li>Frequency: = 365 times/year ECETOC TRA assumes daily use of product.</li> </ul>	A	L		L		L
<ul style="list-style-type: none"> <li>Duration of exposure: = 60 minutes Source: Default ECETOC TRA for Sub Product "Laundry and dishwashing"</li> </ul>	A	L				
<b>Human factors not influenced by risk management</b>						
<ul style="list-style-type: none"> <li>Exposed body parts: two hands (Skin surface: 860 cm<sup>2</sup>) Source: Default ECETOC TRA for Sub Product "Laundry and dishwashing"</li> </ul>						L
<b>Other given operational conditions affecting consumers exposure</b>						
<ul style="list-style-type: none"> <li>Room where tasks take place: Generic room (Volume: 20 m<sup>3</sup>; no ventilation rate assumed) ECETOC TRA assumption</li> </ul>	A	L				
<b>Conditions and measures related to information and behavioural advice to consumers</b>						
<b>Conditions and measures related to personal protection and hygiene</b>						
<b>Additional good practice advice beyond the REACH CSA</b>						



## 9.1.2. Exposure estimation for Consumer use of alcohol in washing and cleaning product

### 9.1.2.1. Exposure estimation for the environment (Use in cleaning product as processing aids)

#### 9.1.2.1.1. Environmental releases

Table 8. Summary of the local releases to the environment

Compartment	Release factor estimation method	Explanation / Justification
Water	ERC (ERC 8a)	Release factor after on site risk management (%): 100 Local release rate (kg/day): 22
Air	ERC (ERC 8a)	Release factor after on site risk management (%): 100 Explanation/Justification: Local release rate from wide dispersive use are taken into account at the regional scale only
Soil	ERC (ERC 8a)	Release factor after on site risk management (%): 0 Explanation/Justification: Indoor use has been assumed

Summed releases from all life cycle stages: see section 9.0.3.

#### 9.1.2.1.2. Environmental exposure

>>>Caution: The exposure estimates have been obtained with EUSES although some parameters are outside EUSES model (see section 9.0.3.2): <<<<

Table 9. Summary of exposure concentrations

Protection target	Exposure concentration	Explanation / Justification
Water: Fresh Water (Pelagic)	Local PEC: 0.151 mg/L Local concentration: 0.139 mg/L	
Water: Fresh Water (Sediment)	Local PEC: 0.646 mg/kg dw	
Water: Marine Water (Pelagic)	Local PEC: 0.015 mg/L Local concentration: 0.014 mg/L	
Water: Marine Water (Sediment)	Local PEC: 0.064 mg/kg dw	
Water: Sewage Treatment Plant (Effluent)	Local PEC: 1.39 mg/L	
Air	Local PEC: 2.39E-4 mg/m <sup>3</sup> Local concentration: 5.52E-6 mg/m <sup>3</sup>	
Soil: Agricultural Soil	Local PEC: 0.019 mg/kg dw Local concentration: 0.018 mg/kg dw	

### 9.1.2.1.3. Indirect exposure of humans via the environment

#### Exposure via inhalation

The exposure concentrations in air are reported in the Table "Summary of exposure concentrations" of the preceding section 9. x.2.1.2 "Environmental exposure".

#### Exposure via food consumption: Total daily intake for humans

Table 10. Summary of estimated daily human doses and concentrations in food

Type of food	Daily human dose through intake		Explanation / Justification
	Total estimated daily intake for humans: 0.005 mg/kg bw/day		
	Estimated daily dose through intake from local exposure	Concentration in food from local exposure	
Drinking water	0.004 mg/kg bw/day	0.151 mg/L	
Fish	3.49E-4 mg/kg bw/day	0.213 mg/kg	
Leaf crops	4.44E-5 mg/kg bw/day	0.003 mg/kg	
Root crops	1.01E-4 mg/kg bw/day	0.018 mg/kg	
Meat	2.9E-8 mg/kg bw/day	6.74E-6 mg/kg	
Milk	5.4E-7 mg/kg bw/day	6.74E-5 mg/kg	
	Dose from regional exposure: see section 9.0.3.3		

Table 11. Summary of exposure concentrations for contributing scenario: Use of laundry and dishwashing product

Route of exposure and type of effects	Exposure concentration	Method / name of exposure assessment	Explanation / Justification
<b>Inhalation:</b> Acute, Local	375 mg/m <sup>3</sup>	<b>Method:</b> External exposure estimation tool  <b>Name:</b> ECETOC TRA	<b>Representativity and reliability:</b> ECETOC TRA: Inhalation exposure model  <b>Remark on exposure value:</b> Event concentration
<b>Inhalation:</b> Long term, Systemic	15.6 mg/m <sup>3</sup>	<b>Method:</b> External exposure estimation tool  <b>Name:</b> ECETOC TRA	<b>Representativity and reliability:</b> ECETOC TRA: Inhalation exposure model  <b>Remark on exposure value:</b> Event concentration averaged over the day
<b>Dermal:</b> Acute, Local	Not available	<b>Method:</b> Conditions of use (OC/RMM) <b>Name:</b> Eye irritation	
<b>Dermal:</b> Long term, Systemic	21.4 mg/kg bw/day	<b>Method:</b> External exposure estimation tool  <b>Name:</b> ECETOC TRA	<b>Representativity and reliability:</b> ECETOC TRA: dermal exposure model  <b>Remark on exposure value:</b> Dose over the day
<b>Oral:</b> Long term, Systemic	0 mg/kg bw/day	<b>Method:</b> External exposure estimation tool  <b>Name:</b> ECETOC TRA	<b>Representativity and reliability:</b> ECETOC TRA: oral exposure model  <b>Remark on exposure value:</b> According to ECETOC TRA, oral exposure not relevant for this sub category

## 10. RISK CHARACTERISATION

See section 9.0.2 "Scope and type of exposure assessment" as to whether a risk characterisation is required for the different target groups and exposure pathways.

### 10.1. Consumer use of alcohol in washing and cleaning product

#### 10.1.1. Human health

##### 10.1.1.1. Workers

This exposure scenario does not address workers.

##### 10.1.1.2. Consumers

Table 16. Risk characterisation: Consumer use of laundry and dishwashing product

Route of exposure and type of effects	Risk characterisation ratio	Risk characterisation
Inhalation: Acute, Local	RCR = 0.395	
Inhalation: Long term, Systemic	RCR = 0.137  Summed RCR including contribution of exposure via the environment (see section 9.x.2.1.3): 0.137	
Dermal: Acute, Local	Qualitative risk characterisation	Prevention of release/exposure: Eye irritancy controlled by substance concentration in product  Expected residual exposure: Not relevant  Conclusion on risk characterisation: Risk controlled
Dermal: Long term, Systemic	RCR = 0.104	
Oral: Long term, Systemic	RCR = 0	
Combined routes: Long term, Systemic	RCR = 0.241  Summed RCR including contribution of exposure via the environment (see section 9.x.2.1.3): 0.241	



# ES FOR COMMUNICATION

## (Full information)

Substance Name: Alcohol

EC Number: xxx-xxx-x

CAS Number: xx-xx-x

Registration Number: xxxxxxxxxxxx<sup>28</sup>

Date of Generation/Revision: 2011-07-20

Author:

### 1. ES 1: Consumer end-use (SU 21); washing and cleaning product

1. Title of Exposure scenario	
PC 35: Washing and cleaning product	
Environment: Component released during end-use	ERC 8a
Consumer	
Use of laundry and dishwashing product	PC 35
Use of trigger spray cleaner products	PC 35
Use of liquid cleaning product for manual surface application	PC 35
Use of abrasive product for manual surface application	PC 35
Use of liquid cleaner for cleaning carpet	PC 35

<b>2. Conditions of use affecting exposure</b>
<b>2.1 Control of environmental exposure: Component released during end use (ERC 8a)</b>
<b>Conditions and measures related to municipal sewage treatment plant</b>
Waste water is to be treated by municipal STP
<b>2.2 Control of consumers exposure for Use of laundry and dishwashing product (PC 35)</b>
<b>Product characteristics</b>
Covers concentration of substance in product up to < 15 %
<b>Amount used, frequency and duration of use/exposure</b>
For each use event, covers use amount up to 50 grams
Covers daily use
Covers duration of exposure up to 60 minutes
<b>Other operational conditions affecting consumers exposure</b>
Covers two hands exposed

3. Exposure estimation and reference to its source		
Environment		
Release route	Release rate (kg/day)	Release estimation method
Water	22	ERC - ERC 8a
Air	0	ERC - ERC 8a
Soil	0	ERC - ERC 8a

Protection target	Exposure estimate (based on: EUSES 2.0)	RCR
Freshwater (pelagic)	0.151 mg/L	0.157
Freshwater (sediment)	0.646 mg/kg dw	0.179
Freshwater (sediment)	0.646 mg/kg dw	0.179
Marine water (pelagic)	0.015 mg/L	0.019
Marine water (sediment)	0.064 mg/kg dw	0.022
Freshwater food chain (predators)		
Marine water food chain (predators)		
Marine water food chain (top predators)		
Effluent	1.39 mg/L	0.002
Agricultural soil	0.019 mg/kg dw	0.03
Terrestrial food chain (predator)		

Risk characterisation for man via the environment <sup>29</sup>
Inhalation: 0
Oral: 0

Consumer exposure					
Long-term, systemic					
Contributing scenario	Inhalation	Dermal	Oral	Combined routes	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: 15.6 mg/m <sup>3</sup> RCR: 0.137	Exposure: 21.4 mg/kg bw/day RCR: 0.104	Exposure: 0 mg/kg bw/day RCR: 0	RCR: 0.241	Inhal: External exposure estimation tool - ECETOC TRA  Derm: External exposure estimation tool - ECETOC TRA  Oral: External exposure estimation tool - ECETOC TRA

<b>Risk characterisation for acute systemic</b>
Not required as no hazard identified

<b>Local effects via inhalation route</b>			
Contributing scenario	Acute	Long term	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: 375 mg/m <sup>3</sup> RCR: 0.395	Not required as no hazard identified	Acute: External exposure estimation tool - ECETOC TRA

<b>Local effects via dermal route</b>			
Contributing scenario	Acute	Long term	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: RCR: Not available	Not required as no hazard identified	Acute: Conditions of use (OC/RMM)



## (reduced information)

Substance Name: Alcohol

EC Number: xxx-xxx-x

CAS Number: xx-xx-x

Registration Number: xxxxxxxxxxxx<sup>31</sup>

Date of Generation/Revision: 2011-07-20

Author:

### 1. ES 0: Consumer end-use (SU 21); washing and cleaning products

1. Title of Exposure scenario	
PC 35: Washing and cleaning products	
Environment: Component released during use	ERC 8a
Consumer	
Use of laundry and dishwashing product	PC 35
Use of trigger spray cleaner products	PC 35
Use of liquid cleaning product for manual surface application	PC 35
Use of abrasive product for manual surface application	PC 35
Use of liquid cleaner for cleaning carpet	PC 35

2. Conditions of use affecting exposure	
2.1 Control of environmental exposure: Component released during use (ERC 8a)	
Conditions and measures related to municipal sewage treatment plant	
Wastewater is to be treated by a municipal STP	
2.2 Control of consumers exposure for Use of laundry and dishwashing product (PC 35)	
Product characteristics	
Covers concentration of substance in product up to < 15 %	
Amount used, frequency and duration of use/exposure	
For each use event, covers use amount up to 50 grams	
Covers daily use	

### 3. Exposure estimation and reference to its source

#### Environment

Release route	Release rate (kg/day)	Release estimation method
Water	22	ERC - ERC 8a
Air	0	ERC - ERC 8a
Soil	0	ERC - ERC 8a

Protection target	Exposure estimate (based on: EUSES 2.0)	RCR
Freshwater (pelagic)	0.151 mg/L	0.157
Freshwater (sediment)	0.646 mg/kg dw	0.179
Freshwater (sediment)	0.646 mg/kg dw	0.179
Marine water (pelagic)	0.015 mg/L	0.019
Marine water (sediment)	0.064 mg/kg dw	0.022
Freshwater food chain (predators)		
Marine water food chain (predators)		
Marine water food chain (top predators)		
Effluent	1.39 mg/L	0.002
Agricultural soil	0.019 mg/kg dw	0.03
Terrestrial food chain (predator)		

#### Risk characterisation for man via the environment<sup>52</sup>

Inhalation: 0

Oral: 0

Consumer exposure					
Long-term, systemic					
Contributing scenario	Inhalation	Dermal	Oral	Combined routes	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: 15.6 mg/m <sup>3</sup> RCR: 0.137	Exposure: 21.4 mg/kg bw/day RCR: 0.104	Exposure: 0 mg/kg bw/day RCR: 0	RCR: 0.241	Inhal: External exposure estimation tool - ECETOC TRA Reference to Subcategory 1 PC35 <sup>33</sup>  Derm: External exposure estimation tool - ECETOC TRA Reference to Subcategory 1 PC35  Oral: External exposure estimation tool - ECETOC TRA Reference to Subcategory 1 PC35

<b>Risk characterisation for acute systemic</b>			
Not required as no hazard identified			

<b>Local effects via inhalation route</b>			
Contributing scenario	Acute	Long term	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: 375 mg/m <sup>3</sup> RCR: 0.395	Not required as no hazard identified	Acute: External exposure estimation tool - ECETOC TRA Reference to Subcategory 1 PC35

<b>Local effects via dermal route</b>			
Contributing scenario	Acute	Long term	Exposure estimation Method
Use of laundry and dishwashing product (PC 35)	Exposure: RCR: Not available	Not required as no hazard identified	Acute: Conditions of use (OC/RMM)

***Your turn to ask!***



<http://echa.europa.eu>

# Development of SDS

## Downstream user workshop

Pedro Roselló Vilarroig

ECHA

4 September Sofia (Bulgaria)

