



Solvent example - extended-Safety Data Sheet review

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Cefic/DUCC workshop on Exposure Scenarios

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Content



- Identifying Use & relevant Exposure Scenario title(s)
- Checking Operational Conditions and Risk Management Measures
- Focus on Worker ES – applying the GES format and content

Identifying Use



- SDS Chapter 1

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Material Name : Solvent xyz
Product Code : A1234
REACH Registration No. : 01-2119463588-24-0002

1.2 Relevant ~~identified uses of the substance or mixture and uses advised against~~

Product use : Please refer to Ch16 and/or the annexes for the registered uses under REACH.

- **OR** Registered Use titles listed in Chapter 1.2

Example Use Titles



Listed in Chapter 1.2 or Chapter 16

Industrial

Manufacture of substance
Distribution of substance
substances
and mixtures
Use in Coatings - Industrial
Use in Cleaning Agents – Industrial
Lubricants – Industrial
Metal working fluids / rolling oils –
Industrial
Use as binders and release agents –
Industrial
Use as a fuel – Industrial
Functional Fluids - Industrial
Use in laboratories – Industrial
Water treatment chemicals – Industrial
Mining chemicals - Industrial

Professional

Use in Coatings - Professional
Use in Cleaning Agents – Professional
Use in oil field drilling and production
operations – Professional
Lubricants - Professional (Low Release)
Lubricants - Professional (High Release)
Metal working fluids / rolling oils
– Professional
Use as binders and release agents
– Professional
Use as a fuel – Professional
Functional Fluids - Professional
Road and construction applications
Use in laboratories - Professional
Explosives manufacture & use
Water treatment chemicals - Professional

Example Use Titles



Listed in Section 1.2 or Section 16

Consumer

Use in Coatings – Consumer

Use in Cleaning Agents – Consumer

Lubricants - Consumer (Low Release)

Lubricants - Consumer (High Release)

Use as a fuel – Consumer

Functional Fluids - Consumer

Other Consumer Uses - Consumer (personal care products)

Water treatment chemicals - Consumer

Identify the title/titles that best reflect your application.

Use the lists as a type of index.

Then go to the related ES titles appended in the Annex

Basic content of the ES



Section 1 Exposure Scenario Title	
Title:	
Use in Cleaning Agents - Industrial	
Use Descriptor	
Sector(s) of Use	SU3
Process Categories	PROC10, PROC13, PROC2, PROC3, PROC4, PROC7, PROC8a, PROC8b
Environmental Release Categories	ERC4
Specific Environmental Release Category	ESVOC 4.4a v1
Processes, tasks, activities covered	
Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers, exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.	

- Section 1 contains
 - A simple title describing the identified use of the substance/product
 - A more extensive explanation describing the range of activities covered by the title
 - A listing of the REACH Use Descriptors (UDs) that are likely to be associated with the use
 - Sector of Use (SU) : industrial, professional or consumers
 - Process Categories (PROCs) : workers
 - Product Categories (PCs) : consumers
 - Environmental Release Categories (ERCs/SpERCs) : environment



Basic content of the Worker ES



SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP
Concentration of substance in product	Covers percentage substance in the product up to 100 % (unless stated differently).
Frequency and Duration of Use	
Covers daily exposures up to 8 hours (unless stated differently)	
Other Operational Conditions affecting worker Exposure.	
Assumes use at not more than 20°C above ambient temperature (unless stated differently).	
Assumes a good basic standard of occupational hygiene is implemented	

- Section 2.1: Includes baseline Operational Conditions applied in the Exposure Scenario which support scaling
- Physical form: includes the volatility range linked to the ECETOC TRA Worker exposure estimates : Low <0.5 kPa; Medium 0.5 – 10 kPa; High >10 kPa
- Concentration – up to 100% (unless stated differently)
- Frequency and Duration of Use – daily up to 8 hours (unless stated differently)
- Unless stated differently – refers to specific requirements included under the Contributing Scenario/task details where they differ from the baseline

Basic content of the Worker ES



SECTION 2	OPERATIONAL CONDITIONS AND RISK MANAGEMENT MEASURES
Section 2.1	Control of Worker Exposure
Product Characteristics	
Physical form of product	Liquid, vapour pressure < 0.5 kPa at STP
Concentration of substance in product	Covers percentage substance in the product up to 100 % (unless stated differently);
Frequency and Duration of Use	
Covers daily exposures up to 8 hours (unless stated differently)	
Other Operational Conditions affecting worker Exposure.	
Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented	

- **Basic standard of occupational hygiene – reflects typical workplace legislative controls as required by the EU Framework Directive, e.g.:**
 - *assumes risk assessment of local activities; safe handling procedures; education and training; clearance of spillages; selection, testing and maintenance of controls (e.g. PPE, ventilation); equipment draining prior to maintenance; regular supply and laundering of work clothes; washing and changing facilities; eating and smoking in designated areas*

Basic content of the ES



Contributing Scenarios	Risk Management Measures
General measures (skin irritants)	Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent / minimise exposures and to report any skin problems that may develop [E3]
General exposures (closed systems). Use in contained systems.	No other specific measures identified
Manual Preparation of material for application. Non-dedicated facility.	Avoid carrying out activities for more than 1 hour [OC27].
Material transfers. Drum/batch transfers. Dedicated facility	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). Or, avoid carrying out activities in enclosed spaces for more than 4 hours. [OC28]
Roller, spreader, flow application	Wear a respirator conforming to EN149 with a P3 filter or better [PPE22].
Manual Spraying.	Carry out in a vented booth or extracted enclosure. [E57] Or, Wear a respirator conforming to EN140 with Type A filter or better [PPE22].

General measures applicable to all activities

Contributing Scenario titles defined in conjunction with DU Assn

Basic content of the ES



RMMs defined with associated effectiveness values

Vented booth – 90%; Half mask respirator - 90%

No other RMMs over general measures / Intrinsic to the CS/PROC / Flammability

Contributing Scenarios	Risk Management Measures
General measures (skin irritants)	Avoid direct skin contact with product. Identify potential areas for indirect skin contact. Wear gloves (tested to EN374) if hand contact with substance likely. Clean up contamination/spills as soon as they occur. Wash off any skin contamination immediately. Provide basic employee training to prevent / minimise exposure and to report any skin problems that may develop. [E3]
General exposures (closed systems). Use in contained systems.	No other specific measures identified. [E120]
Manual Preparation of material for application. Non-dedicated facility.	Avoid carrying out activities involving exposure for more than 1 hour [OC27].
Material transfers. Drum/batch transfers. Dedicated facility	Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour). [E11]. Or, avoid carrying out activities involving exposure for more than 4 hours. [OC28]
Roller, spreader, flow application	Wear a respirator conforming to EN140 with Type A filter or better [PPE22].
Manual Spraying.	Carry out in a vented booth or extracted enclosure. [E57] Or, Wear a respirator conforming to EN140 with Type A filter or better [PPE22].

Basic content of the ES



SECTION 3

EXPOSURE ESTIMATION

Section 3.1 - Health

The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

SECTION 4

GUIDANCE TO CHECK COMPLIANCE WITH THE EXPOSURE SCENARIO

Section 4.1 - Health

Predicted exposures are not expected to exceed the DN(M)EL when the Risk Management Measures/Operational Conditions outlined in Section 2 are implemented

Available hazard data do not enable the derivation of a DNEL for dermal irritant effects.

Risk Management Measures are based on qualitative risk characterisation

Where other Risk Management Measures/Operational Conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

Related to
the
quantitative
assessment

Comparable
or more
stringent
control

Related to
the
qualitative
assessment

Other relevant information



- Read the ES in conjunction with main Sections of SDS, e.g.
 - Details of DNEL values
 - Details of appropriate glove materials
 - Details of appropriate RPE filter type
 - Flammability controls where relevant



Thank you for your attention