

LCID Example 1a - Introduction

1. Purpose of the example

The purpose of this example is to illustrate how the results of the “example 2” of the REACH Practical Guide¹ can be embedded in the main body of a Safety Data sheet (SDS). Like for the example in the guide, only the toxicological part is taken into account for this representation. Please note that there is an SDS provided in parallel, which uses exactly the same content, but provides the information in the annex of the SDS. As opposed to the practical guide, a complete scenario with all PROCs has been selected and the corresponding RMMs and OCs are provided in this example.

The example is very generic but still an ideal illustration of how LCID can be applied. Nevertheless, as a limiting requirement, the example is based on the assumption that the addressed scenario with corresponding OCs and RMMs is available for all components.

2. Mixture information

2.1. Information on the mixture

Composition:	Methanol Propanol	 ≥ 25 % - ≤ 50 % ≥ 50 % - ≤ 75 %
Classification of the mixture:	H319 Causes serious eye irritation H336 May cause drowsiness or dizziness H370 Causes damage to organs H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled	
Use of the mixture:	Use as cleaning agent (industrial application)	

2.2. Hazardous substances entering in the composition of the mixture

Substance	DNELs	CLP classification
Methanol	Worker, LT, systemic, dermal: 40mg/kg Worker, LT, systemic, inhal.: 260mg/m ³ Only relevant DNELs provided	Acute Tox. 3 (Inhalation - vapour) Acute Tox. 3 (oral) Acute Tox. 3 (dermal) STOT SE 1 SCLs: STOT SE 2: 3 - < 10 % STOT SE 1: ≥ 10 %
Propanol	Worker, LT, systemic, dermal: 888mg/kg Worker, LT, systemic, inhal.: 500mg/m ³ Only relevant DNELs provided	Eye Dam./Irrit. 2 STOT SE 3 (drowsiness and dizziness)

¹ REACH Practical Guide on Safe Use Information for Mixtures under REACH – The Lead Component Identification (LCID) Methodology
<http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/REACH-Practical-Guide-on-Safe-Use-Information-for-Mixtures-under-REACH-The-LCID-Methodology.pdf>

3. Outcome of the LCID methodology

Lead component systemic effects (dermal and inhalation)	Methanol
Additional local effects	Eye irritation

4. OC and RMM associated to Lead Component for the selected use

This example covers the hypothetical industrial use in cleaning agents which includes PROCs 1, 2, 3, 7, 8a, 8b, 10, and 13. RMMs and OCs from the lead component have been collected from these PROCs of the lead component. Basically, the worst case for all RMMs and OCs has been selected and included in section 8.2. Spray applications have been assessed separately in this section. Eye protection based on the local effects of propanol have been added. The PROC number, RMM effectiveness, and concentration used in the scenario is not provided, since it does not add any helpful information in this consolidated version.

5. Consolidated OC/RMM for the mixture

Eye protection: Safety glasses

Example 1a - Safety Data Sheet content

Extract of relevant safe use information derived by application of the LCID methodology

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Embedded Expo

Chemical name: Mix
CAS Number: 9999-88-7

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

Use as cleaning agent (industrial application)

1.3. Details of the supplier of the safety data sheet

Company:
LCID Ltd
Europe

Telephone: +xx xxx xx-x
E-mail address: info@lciid-ltd.com

1.4. Emergency telephone number

International emergency number:
Telephone: +xx xxx xx-x

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Acute Tox. 3 (Inhalation - vapour)
Acute Tox. 3 (oral)
Acute Tox. 3 (dermal)
Eye Dam./Irrit. 2
STOT SE 1
STOT SE 3 (Vapours may cause drowsiness and dizziness.)

H319, H336, H370, H301 + H311 + H331

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:
Danger

Hazard Statement:

- | | |
|----------------------|--|
| • H319 | • Causes serious eye irritation. |
| • H336 | • May cause drowsiness or dizziness. |
| • H370 | • Causes damage to organs. |
| • H301 + H311 + H331 | • Toxic if swallowed, in contact with skin or if inhaled |

Precautionary Statements (Prevention):

- | | |
|--------|--|
| • P271 | • Use only outdoors or in a well-ventilated area. |
| • P280 | • Wear protective gloves/protective clothing/eye protection/face protection. |
| • P260 | • Do not breathe dust/gas/mist/vapours. |
| • P270 | • Do not eat, drink or smoke when using this product. |
| • P264 | • Wash with plenty of water and soap thoroughly after handling. |

Precautionary Statements (Response):

- | | |
|----------------------|--|
| • P311 | • Call a POISON CENTER or doctor/physician. |
| • P305 + P351 + P338 | • IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| • P304 + P340 | • IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| • P301 + P310 | • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| • P303 + P361 + P353 | • IF ON SKIN (or hair): Wash with plenty of soap and water. Take off immediately all contaminated clothing and wash it before reuse. |
| • P330 | • Rinse mouth. |

Precautionary Statements (Storage):

- | | |
|---------------|--|
| • P403 + P233 | • Store in a well-ventilated place. Keep container tightly closed. |
| • P405 | • Store locked up. |

Precautionary Statements (Disposal):

- | | |
|--------|---|
| • P501 | • Dispose of contents/container to hazardous or special waste collection point. |
|--------|---|

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 5 %, Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 5 %, Inhalation - mist

2.3. Other hazards

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Chemical nature

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

methanol

Content (W/W): $\geq 25\%$ - $< 50\%$
CAS Number: 67-56-1
EC-Number: 200-659-6
INDEX-Number: 603-001-00-X

Flam. Liq. 2
Acute Tox. 3 (Inhalation - vapour)
Acute Tox. 3 (oral)
Acute Tox. 3 (dermal)
STOT SE (Central nervous system, Optic nerve)
1
H225, H311, H331, H301, H370

Lead component

Specific concentration limit:

STOT SE 2: 3 - $< 10\%$
STOT SE 1: $\geq 10\%$

propan-2-ol; isopropyl alcohol; isopropanol

Content (W/W): $\geq 50\%$ - $< 75\%$
CAS Number: 67-63-0
EC-Number: 200-661-7
INDEX-Number: 603-117-00-0

Flam. Liq. 2
Eye Dam./Irrit. 2
STOT SE 3 (drowsiness and dizziness)
H225, H319, H336

Local effect

3.2. Mixtures

Not applicable

SECTION 4: First-Aid Measures

SECTION 5: Fire-Fighting Measures

SECTION 6: Accidental Release Measures

SECTION 7: Handling and Storage

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

67-56-1: methanol

Skin Designation (OEL (EU))

The substance can be absorbed through the skin.

TWA value 260 mg/m³ ; 200 ppm (OEL (EU))

indicative

Components with DNEL

67-56-1: methanol

worker: Long-term exposure- systemic effects, dermal: 40 mg/kg
 worker: Short-term exposure - systemic effects, dermal: 40 mg/kg
 worker: Long-term exposure- systemic effects, Inhalation: 260 mg/m³
 worker: Short-term exposure - systemic effects, Inhalation: 260 mg/m³
 consumer: Long-term exposure- systemic effects, oral: 8.0 mg/kg
 consumer: Short-term exposure - systemic effects, oral: 8.0 mg/kg
 consumer: Long-term exposure- systemic effects, dermal: 8.0 mg/kg
 consumer: Short-term exposure - systemic effects, dermal: 8.0 mg/kg
 consumer: Long-term exposure- systemic effects, Inhalation: 50 mg/m³
 consumer: Short-term exposure - systemic effects, Inhalation: 50 mg/m³

67-63-0: propan-2-ol; isopropyl alcohol; isopropanol

worker: Long-term exposure- systemic effects, dermal: 888 mg/kg
 worker: Long-term exposure- systemic effects, Inhalation: 500 mg/m³
 consumer: Long-term exposure- systemic effects, dermal: 319 mg/kg
 consumer: Long-term exposure- systemic effects, Inhalation: 89 mg/m³
 consumer: Long-term exposure- systemic effects, oral: 26 mg/kg

8.2. Exposure controls

Assumption:

Concentration used for calculation \geq LC concentration (or $C_{weighted}$, if applicable)

Technical protective equipment

Provide local exhaust ventilation to control vapours.

In case of spray applications: Ensure that a spraying booth is used. Provide a good standard of general ventilation.

Lead compound information

Personal protective equipment

Hand protection:

Wear chemical resistant protective gloves.

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

butyl rubber (butyl) - 0.7 mm coating thickness

fluoroelastomer (FKM) - 0.7 mm coating thickness

Polyethylene-Laminate (PE laminate) - ca. 0.1 mm coating thickness

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN 374)

chloroprene rubber (CR) - 0.5 mm coating thickness

nitrile rubber (NBR) - 0.4 mm coating thickness

Eye protection:

Safety glasses

RMM for local effects

General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

Regular inspection and maintenance of equipment and machines.

Lead compound information

Data in section 8.2 refer to the lead component: Methanol (CAS 67-56-1). Local effects have additionally been considered.

SECTION 9: Physical and Chemical Properties

SECTION 10: Stability and Reactivity

SECTION 11: Toxicological Information

SECTION 12: Ecological Information

SECTION 13: Disposal Considerations

SECTION 14: Transport Information

SECTION 15: Regulatory Information

SECTION 16: Other Information

Relevant exposure scenario information for the components of this mixture has been included in section 7 and/or 8 of this SDS and therefore no annex is provided.

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