

LCID Example 3 - Introduction

1) Purpose of the example

The decision if Information on safe use is given as an annex or embedded in the main body is made based on the classification of the mixture. This mixture is classified for local effects – skin and eye irritation - only. Rather general Safe Use Information is sufficient in this case.

2) Mixture description

a) Information on the mixture

Composition:	Glycerol, propoxylated ≥ 10 - $< 20\%$ Aminopolyether ≥ 5 - $< 10\%$ Benzyldimethylamine ≥ 1 - $< 2.5\%$ Non-hazardous others ≥ 30 - $< 85\%$
Classification of the mixture:	H315, H319
Use of the mixture:	Polyol components for the production of polyurethanes

b) Hazardous substances entering in the composition of the mixture

Substance	DNEL(s) (systemic-LT) Lowest PNEC(s) [other limit values]	CLP classification
Glycerol, propoxylated	DNEL inhalation: 98 mg/m ³ DNEL dermal: 13.9 mg/kg bw/day	Acute Tox. 4 Oral H302
Aminopolyether	DNEL inhalation: 3.9 mg/m ³ DNEL dermal: 7 mg/kg bw/day PNEC marine water: 0.002 mg/l PNEC freshwater: 0.02 mg/l PNEC sediment (freshwater): 0.10396 mg/kg dry weight PNEC sediment (marine water): 0.010424 mg/kg dry weight soil: 0.009 mg/kg dry weight STP: 180 mg/l	Eye Irrit. 2 H319
Benzyldimethylamine	DNEL inhalation: 7.4 mg/m ³ DNEL dermal: 2.1 mg/kg bw/day PNEC marine water: 0.00048 mg/l PNEC freshwater: 0.0048 mg/l PNEC sediment (freshwater): 0.071 mg/kg dry weight soil: 0.0114 mg/kg dry weight STP: 543 mg/l	Flam. Liq. 3 H226 Acute Tox. 4 Oral H302 Acute Tox. 4 Dermal H312 Acute Tox. 3 Inhalative H331 Skin Corr. 1B H314 Eye Dam. 1 H318 Aquatic Chronic 3 H412

3) Outcome of the LCID methodology

As the mixture is classified for local effects only no further Lead Components need to be derived.

Local effects, eyes	Aminopolyether, Benzyldimethylamine
Local effects, skin	Benzyldimethylamine

4) Operation conditions (OC) and risk management measures (RMM) associated to Priority Substances, Lead Components and components driving local effects for the selected use of the mixture

Benzyldimethylamine	Covers the percentage of the substance in the product up to 100%: Wear chemically resistant gloves (tested to EN374) in combination with 'basic' employee training. Effectiveness: 90% Use suitable eye protection.
Aminopolyether	Safety goggles

5) Consolidated OC/RMM for inclusion in the mixture safety data sheet

Wear chemically resistant gloves (tested to EN374).

- As the mixture only contains ≥ 1 - $< 2.5\%$ while the OC/RMM cover Benzyldimethylamine up to 100% the higher effectiveness of an additional 'basic' employee training is deemed unnecessary (see Chapter 4 of explanation manuscript concerning adaption of RMMs to concentrations in mixtures)

Wear eye protection

Example 3 - Safety Data Sheet content

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

1.1 Product identifier

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

Use:

Polyol components for the production of polyurethanes

1.3 Details of the supplier of the safety data sheet

Mixtures TF

Tel.: XX

Email: ProductSafety@TF.com

1.4 Emergency telephone number

XX

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Skin irritation, Category 2 (H315)

Eye irritation, Category 2 (H319)

2.2 Label elements



Warning

Hazard statements:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements:

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

2.3 Other hazards

The following percentage of the mixture consists of ingredient(s) with unknown acute inhalation toxicity: 5 %

SECTION 3: Composition/information on ingredients

Type of product: Mixture

3.2 Mixtures

Polyol mixture

Hazardous components

Glycerol, propoxylated

Concentration [wt.-%]: ≥ 10 - < 20

CAS-No.: 25791-96-2

Classification (1272/2008/CE): Acute Tox. 4 Oral H302

Aminopolyether

Concentration [wt.-%]: ≥ 5 - < 10

EC-No.: 500-158-5

REACH Registration Number: 01-2119474446-31-0002

CAS-No.: 63641-63-4

Classification (1272/2008/CE): Eye Irrit. 2 H319

Benzyltrimethylamine

Concentration [wt.-%]: ≥ 1 - < 2.5

Index-No.: 612-074-00-7

EC-No.: 203-149-1

REACH Registration Number: 01-2119529232-48

CAS-No.: 103-83-3

Classification (1272/2008/CE): Flam. Liq. 3 H226 Acute Tox. 3 Inhalative H331 Acute Tox. 4

Dermal H312 Acute Tox. 4 Oral H302 Skin Corr. 1B H314 Eye Dam. 1 H318 Aquatic

Chronic 3 H412

Candidate List of Substances of Very High Concern for Authorisation

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

SECTION 4: First aid measures

SECTION 5: Firefighting measures

SECTION 6: Accidental release measures

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.

In all workplaces or parts of the plant where high concentrations of aerosols and/or vapors may be generated (e.g. during pressure release, mold venting or when cleaning mixing heads with an air blast), appropriately located exhaust ventilation must be provided in such a way that the WEL is not exceeded. The air should be drawn away from the personnel handling the product. The efficiency of the exhaust equipment should be periodically checked.

Precautions should generally be taken against electrostatic charges according to the equipment used and the way the product is handled and packaged.

Keep away from foodstuffs, drinks and tobacco. Wash hands before breaks and at the end of workday. Keep working clothes separately. Change contaminated or soaked clothing immediately.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and dry.

Further specific information see our "Technical Information"

Storage class (TRGS 510) : 10: Combustible liquids

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****Derived No Effect Level (DNEL)****Aminopolyether**

Value type	Route of exposure	Health Effects	Value	Remarks
Workers	Inhalation	Long-term systemic effects	3,9 mg/m ³	Most sensitive endpoint: Repeated dose toxicity
Workers	Inhalation	Acute systemic effects		Not relevant
Workers	Inhalation	Long-term local effects		Not relevant
Workers	Inhalation	Acute local effects		Not relevant
Workers	Dermal	Long-term systemic effects	7.0 mg/kg bw/day	Most sensitive endpoint: Repeated dose toxicity
Workers	Dermal	Acute systemic effects		Not relevant
Workers	Dermal	Long-term local effects		Not relevant
Workers	Dermal	Acute local effects		Not relevant
Consumers	Inhalation	Long-term systemic effects	1.2 mg/m ³	Most sensitive endpoint: Repeated dose toxicity
Consumers	Inhalation	Acute systemic effects		Not relevant
Consumers	Inhalation	Long-term local effects		Not relevant
Consumers	Inhalation	Acute local effects		Not relevant
Consumers	Dermal	Long-term systemic effects	4.2 mg/kg bw/day	Most sensitive endpoint: Repeated dose toxicity
Consumers	Dermal	Acute systemic effects		Not relevant
Consumers	Dermal	Long-term local effects		Not relevant
Consumers	Dermal	Acute local effects		Not relevant
Consumers	Oral	Long-term systemic effects	0.33 mg/kg bw/day	Most sensitive endpoint: Repeated dose toxicity
Consumers	Oral	Acute systemic effects		Not relevant

Benzyldimethylamine

Value type	Route of exposure	Health Effects	Value	Remarks
Workers	Inhalation	Long-term systemic effects	7.4 mg/m ³	
Workers	Inhalation	Long-term local effects	1 mg/m ³	
Workers	Dermal	Long-term systemic effects	2.1 mg/kg bw/day	

Glycerol, propoxylated

Value type	Route of exposure	Health Effects	Value	Remarks
Workers	Inhalation	Long-term systemic effects	98 mg/m ³	
Workers	Dermal	Long-term systemic effects	13.9 mg/kg bw/day	

Predicted No Effect Concentration (PNEC)**Aminopolyether**

Compartment	Value	Remarks
Fresh water	0.02 mg/l	
Fresh water sediment	0.10396 mg/kg	dry weight
Fresh water sediment	0.0226 mg/kg wet weight	
Marine water	0.002 mg/l	
Marine sediment	0.010424 mg/kg	dry weight
Marine sediment	0.002266 mg/kg wet weight	
Sewage treatment plant	180 mg/l	
Soil	0.009 mg/kg	dry weight
Soil	0.008 mg/kg wet weight	
Oral		Not relevant

Benzyldimethylamine

Compartment	Value	Remarks
Fresh water	0.0048 mg/l	
Fresh water sediment	0.071 mg/kg	
Marine water	0.00048 mg/l	
Sewage treatment plant	543 mg/l	
Soil	0.0114 mg/kg	

8.2 Exposure controls**Respiratory protection**

Unless the product is entirely enclosed, do not handle it until you have studied the respiratory precautions issued by the appropriate authority or accident prevention association. If vapors form, respirators must be used. Put on full-mask respirator with filter type ABEK.

Hand protection

Conditionally suitable materials for protective gloves; EN 374:

Nitrile rubber - NBR (≥ 0.35 mm)

Polyvinyl chloride - PVC (≥ 0.5 mm)

Polychloroprene - CR: thickness ≥ 0.5 mm

Butyl rubber - IIR (≥ 0.5 mm)

Fluorinated rubber - FKM (≥ 0.4 mm)

Breakthrough time not tested; dispose of immediately after contamination.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear suitable protective clothing.

SECTION 9: Physical and chemical properties**SECTION 10: Stability and reactivity****SECTION 11: Toxicological information**

Toxicological studies on the product are not yet available.

SECTION 12: Ecological information**SECTION 13: Disposal considerations****SECTION 14: Transport information****SECTION 15: Regulatory information****15.2 Chemical Safety Assessment**

A Chemical Safety Assessment has been carried out for:

Aminopolyether

Benzyltrimethylamine

SECTION 16: Other information

No annex is provided for this mixture, because the necessary information about operational conditions and Risk Management Measures (RMM) of the identified uses can be found in section 8 of this SDS.

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