

Safety Data Sheet

according to UK REACH Regulation



Petol ® 320/02

Revision date: 04.08.2021

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

1.1. Product identifier

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

Use of the substance/mixture

Polyol component for polyurethane manufacture

1.3. Details of the supplier of the safety data sheet

Company name: RAMPF Eco Solutions GmbH & Co. KG
Street: Elsässerstr. 7
Place: D-66954 Pirmasens
Telephone: +49 (0) 6331 8703-0
e-mail (Contact person): eco.solutions@rampf-group.com
Responsible Department: +49 (0) 6331 8703-0
Telefax: +49 (0) 6331 8703-42

1.4. Emergency telephone number:

+49 (0) 6331 8703-0 (Monday - Friday 8:00 am - 3:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH210 Safety data sheet available on request.

Additional advice on labelling

According to EC directives or the corresponding national regulations the product does not have to be labelled.

2.3. Other hazards

None known

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Formulation of polyols

Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
111-46-6	2,2' -oxybisethanol, diethylene glycol			< 15 %
	203-872-2	603-140-00-6	01-2119457857-21	
	Acute Tox. 4; H302			
123-91-1	1,4-dioxane			< 0,3 %
	204-661-8	603-024-00-5		
	Flam. Liq. 2, Carc. 2, Eye Irrit. 2, STOT SE 3; H225 H351 H319 H335 EUH019 EUH066			

Full text of H and EUH statements: see section 16.

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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
111-46-6	203-872-2	2,2' -oxybisethanol, diethylene glycol	< 15 %
		dermal: LD50 = 13300 mg/kg; oral: LD50 = 1120 mg/kg	
123-91-1	204-661-8	1,4-dioxane	< 0,3 %
		inhalation: LC50 = 48,5 - 54,3 mg/l (vapours); dermal: LD50 = 7378 mg/kg; oral: LD50 = 5200 mg/kg	

Further Information

There are no data available on the mixture itself.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.
In the event of persistent symptoms receive medical treatment.
Remove affected person from the danger area and lay down.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
In the event of persistent symptoms receive medical treatment.

After contact with skin

Wash with plenty of water/soap.
If skin irritation or rash occurs: Get medical advice/attention.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink plenty of water.
Never give anything by mouth to an unconscious person or a person with cramps.
Call a physician immediately.
Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself.

4.3. Indication of any immediate medical attention and special treatment needed

There are no data available on the mixture itself.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated:
Carbon monoxide, Carbon dioxide (CO₂)

5.3. Advice for firefighters

Protective clothing.
Use breathing apparatus with independent air supply.

Additional information

none

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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General measures

- In case of vapour formation use respirator.
- Provide adequate ventilation.
- Use personal protective clothing.
- Keep away from sources of ignition - No smoking.

6.2. Environmental precautions

- Clear contaminated areas thoroughly.
- Do not discharge into the drains/surface waters/groundwater.

6.3. Methods and material for containment and cleaning up

Other information

- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
- Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

none

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

- Keep container tightly closed.
- Provide sufficient air exchange and/or exhaust in work rooms.
- Avoid contact with skin, eyes and clothes.

Advice on protection against fire and explosion

No special measures are necessary.

Advice on general occupational hygiene

- Do not inhale vapours.
- Wash hands before breaks and after work.
- Avoid contact with skin, eyes and clothes.
- When using do not eat, drink, smoke, sniff.
- Take off contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

- Keep container tightly closed in a cool, well-ventilated place.
- Protect from direct sunlight.

Further information on storage conditions

Keep away from food, drink and animal feedingstuffs. Do not expose to temperatures exceeding 50 °C/122 °F.

7.3. Specific end use(s)

There are no data available on the mixture itself.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
123-91-1	1,4-Dioxane	20	73		TWA (8 h)	WEL
111-46-6	2,2'-Oxydiethanol	23	101		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
111-46-6	2,2'-oxybisethanol, diethylene glycol			
	Worker DNEL, long-term	inhalation	systemic	44 mg/m ³
	Worker DNEL, long-term	dermal	systemic	43 mg/kg bw/day
	Worker DNEL, long-term	inhalation	local	60 mg/m ³

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PNEC values

CAS No	Substance	
Environmental compartment		Value
111-46-6	2,2' -oxybisethanol, diethylene glycol	
Freshwater		10 mg/l
Marine water		1 mg/l
Freshwater sediment		20,9 mg/kg
Marine sediment		2,09 mg/kg
Micro-organisms in sewage treatment plants (STP)		199,5 mg/l
Soil		1,53 mg/kg

Additional advice on limit values

E: inhalable fraction

8.2. Exposure controls

Appropriate engineering controls

Provide adequate ventilation as well as local exhaust at critical locations.

Provide appropriate exhaust ventilation at machinery.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Chemical-resistant gloves (EN 374)

Suitable materials also for extended, direct contact (recommended: protection index 6, corresponding to a permeation rate > 480 minutes according to EN 374):

butyl rubber (Butyl) - = 0.7 mm thickness; i.e. <Butoject 898> made by KCL.

Nitrile rubber (Nitrile) - 0.4 mm thickness : i.e.<Camatril Velours 730> made by KCL.

Because of the great variety of glove types, the manufacturer's instructions for use must be adhered to.

The data given refer to information from glove manufacturers or have been assessed by analogy to similar materials. It should be taken into consideration, that due to the great number of influential factors such as the temperature, the daily durability of chemicals resistant protective gloves may be considerably reduced in practice, compared to the permeation rate assessed according to EN 374.

Skin protection

Wear suitable protective clothing.

Safety Shoes

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

If product is sprayed, use fresh-air breathing apparatus or (only short-term use) a combination filter A2-P2.

Environmental exposure controls

There are no data available on the mixture itself.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	beige
Odour:	not determined

Changes in the physical state

Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	not determined
Flash point:	not determined

Flammability

Solid/liquid:	not applicable
Gas:	not applicable

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Explosive properties

Product does not present an explosion hazard.

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined

Oxidizing properties

not applicable

pH-Value:	not determined
Viscosity / dynamic: (at 20 °C)	not determined
Flow time:	not determined
Water solubility:	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density:	not determined
Relative vapour density:	not determined

9.2. Other information

Other safety characteristics

There are no data available on the mixture itself.

SECTION 10: Stability and reactivity

10.1. Reactivity

Exothermic reaction with: Isocyanate

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

There are no data available on the mixture itself.

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.

10.5. Incompatible materials

There are no data available on the mixture itself.

10.6. Hazardous decomposition products

The product is stable under storage at normal ambient temperatures.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

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CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
111-46-6	2,2' -oxybisethanol, diethylene glycol					
	oral	LD50 mg/kg	1120	Practical experience/human evidence		
	dermal	LD50 mg/kg	13300	Rabbit		
123-91-1	1,4-dioxane					
	oral	LD50 mg/kg	5200	Rat		
	dermal	LD50 mg/kg	7378	Rabbit	RTECS	
	inhalation (4 h) vapour	LC50 mg/l	48,5 - 54,3	Rat		

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the mixture itself.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
111-46-6	2,2' -oxybisethanol, diethylene glycol					
	Acute fish toxicity	LC50 mg/l	75200	96 h	Pimephales promelas (fathead minnow)	
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna (Big water flea)	
123-91-1	1,4-dioxane					
	Acute fish toxicity	LC50 mg/l	9850 - 10800	96 h	Pimephales promelas	

12.2. Persistence and degradability

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There are no data available on the mixture itself.

CAS No	Chemical name	Method	Value	d	Source
		Evaluation			
111-46-6	2,2' -oxybisethanol, diethylene glycol				
		OECD 301 A	90 - 100%	28	
	Readily biodegradable (according to OECD criteria).				

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
111-46-6	2,2' -oxybisethanol, diethylene glycol	-1,98
123-91-1	1,4-dioxane	-0,42

BCF

CAS No	Chemical name	BCF	Species	Source
111-46-6	2,2' -oxybisethanol, diethylene glycol	100	Leuciscus idus (golden orfe)	

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Endocrine disrupting properties

There are no data available on the mixture itself.

12.7. Other adverse effects

There are no data available on the mixture itself.

Further information

Do not allow to enter into surface water or drains.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Where possible recycling is preferred to disposal.

Can be incinerated, when in compliance with local regulations.

It is not possible to give this product a waste code number according to the European waste catalogue because only the intended use of the user consents the assignment of a specific code number.

The waste code number must be agreed with the disposer / manufacturer / competent authority.

Contaminated packaging

Handle contaminated packages in the same way as the substance itself.

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:

No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

14.4. Packing group:

No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

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- 14.1. UN number:** No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Keep away from food, drink and animal feedingstuffs.

14.7. Maritime transport in bulk according to IMO instruments

There are no data available on the mixture itself.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: 1,4-dioxane

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
2,2'-oxybisethanol, diethylene glycol

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
EUH019	May form explosive peroxides.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH210	Safety data sheet available on request.

Further Information

The classification is based on the calculation method according to Regulation (EU) No. 1272/2008

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

Key literature references and sources for data: Regulation (EC) No 1907/2006; Regulation (EC) No. 1272/2008

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)