

Printing date 11.08.2017 Version number 1 Revision: 10.02.2016

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

- · 1.1 Product identifier
- · Trade name: METOLAT® P 872
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Concrete/Mortar admixtures
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

MÜNZING CHEMIE GmbH

Münzingstrasse 2 74232 Abstatt GERMANY

E-Mail: info@munzing.com Tel.: +49 7131 987-100

· Further information obtainable from:

Product Safety Department

E-mail (MSDS): msds@munzing.com

• 1.4 Emergency telephone number: +49 761 19240 (Vergiftungs-Informations-Zentrale VIZ Freiburg)

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Eye Dam. 1 H318 Causes serious eye damage.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms



GHS05

- · Signal word Danger
- · Hazard-determining components of labelling:

2-[2-(2-Butoxyethoxy)ethoxy]ethanol

· Hazard statements

H318 Causes serious eye damage.

· Precautionary statements

P280 Wear eye protection / face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

- · 2.3 Other hazards Risk of dust explosion
- · Results of PBT and vPvB assessment
- · PBT: None.
- · vPvB: None.

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SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.

· Dangerous components:			
CAS: 143-22-6	2-[2-(2-Butoxyethoxy)ethoxy]ethanol	Eye Dam. 1, H318	20-50%
EINECS: 205-592-6			
Reg.nr.: 01-2119531322-53			

- · SVHC None.
- · Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- General information: Immediately remove any clothing soiled by the product.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire extinguishing methods suitable to surrounding conditions.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters
- · Protective equipment: Do not inhale explosion gases or combustion gases.
- · Additional information

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective clothing.

Avoid formation of dust.

Use respiratory protective device against the effects of fumes/dust/aerosol.

- · 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Pick up mechanically.

Dispose of the material collected according to regulations.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

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See Section 13 for disposal information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from heat and direct sunlight.

Prevent formation of dust.

Ensure good ventilation/exhaustion at the workplace.

· Information about fire - and explosion protection:

Protect against electrostatic charges.

Keep ignition sources away - Do not smoke.

Dust can combine with air to form an explosive mixture.

- · 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: Store in a cool location.
- Information about storage in one common storage facility: Store away from oxidising agents.
- · Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· DNELs				
CAS: 143-22-6 2-[2-(2-Butoxyethoxy)ethoxy]ethanol				
Oral	consumer, long-term exposure, systemic effects	2.5 mg/kg bw/day (human)		
Dermal	worker, long-term exposure, systemic effects	50 mg/kg bw/day (human)		
	consumer, long-term exposure, systemic effects	25 mg/kg bw/day (human)		
Inhalative	worker, long-term exposure, systemic effects	195 mg/m³ (human)		
	consumer, long-term exposure, systemic effects	117 mg/m^3 (human)		

· PNECs

CAS: 143-22-6 2-[2-(2-Butoxyethoxy)ethoxy]ethanol

fresh water

marine water

aqua - intermittent release

soil

sediment (fresh water)

sewage treatment plant

1.5 mg/l (not specified)

0.15 mg/l (not specified)

5 mg/l (not specified)

0.45 mg/kg (not specified)

200 mg/l (not specified)

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

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Avoid contact with the eyes.

Do not inhale dust / smoke / mist.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Protection of hands:

Only use chemical-protective gloves with CE-labelling of category III.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· Penetration time of glove material

For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).

The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.

- · Eye protection: Tightly sealed goggles
- · **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
· General Information · Appearance:	
Form:	Solid
Colour:	White
· Odour:	Mild
· Odour threshold:	Not determined.
· pH-value (20 g/l) at 20°C:	≈7.5 (DIN ISO 976)
· Change in condition Melting point/freezing point: Initial boiling point and boiling range:	Undetermined. Undetermined.
· Flash point:	Not applicable.
· Flammability (solid, gas):	Product is not flammable.
· Ignition temperature:	Not determined.
· Decomposition temperature:	Not determined.
· Auto-ignition temperature:	Not determined.
· Explosive properties:	Product is not explosive. However, formation of explosive dust/vapour mixtures are possible.
· Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.

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· Oxidising properties	None.	
· Vapour pressure:	Not applicable.	
· Density:		
Bulk density at 20°C:	$\approx 0.47 \text{ g/cm}^3 \text{ (DGF H-II 1b)}$	
Relative density	Not determined.	
Vapour density	Not applicable	
Evaporation rate	Not applicable	
· Solubility in / Miscibility with		
water:	Insoluble.	
Partition coefficient: n-octanol/water:	Not determined.	
· Viscosity:		
Dynamic:	Not applicable	
· Solvent content:		
VOC (EC)	0.00 %	
· 9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- · 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions Risk of dust explosion.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

· LD/LC50	· LD/LC50 values relevant for classification:		
		2-[2-(2-Butoxyethoxy)ethoxy]ethanol	
Oral .	LD50	>5,170 mg/kg (rat)	
Dermal .	LD50	3,540 mg/kg (rabbit)	

- · Primary irritant effect:
- $\textbf{\cdot Skin corrosion/irritation} \ \textit{Based on available data, the classification criteria are not met.}$
- · Serious eye damage/irritation Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- $\cdot \textit{Reproductive toxicity } \textit{Based on available data, the classification criteria are not met.}$
- · 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.

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

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

CAS: 143-22-6 2-[2-(2-Butoxyethoxy)ethoxy]ethanol

EC50 (static) >500 mg/l (daphnia) (Daphnia magna / 48 h)

EC10 (static) 612.6 mg/l (alga) (Desmodesmus subspicatus / 72 h)

>1,995 mg/l (bacteria) (Activated sludge / 30 min. (OECD 209))

LC50 (static) 2,200-4,600 mg/l (fish) (Leucicus idus / 96 h)

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

· 12.5 Results of PBT and vPvB assessment

According to Annex XIV of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fullfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification.

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· European waste catalogue

16 03 05* organic wastes containing dangerous substances

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · Recommended cleansing agents: Water, if necessary together with cleansing agents.

SECTION 14: Transport information

- · 14.1 UN-Number
- · ADR/RID/ADN, ADN, IMDG, IATA Void

· 14.2 UN proper shipping name

- · ADR/RID/ADN, ADN, IMDG, IATA Void
- · 14.3 Transport hazard class(es)
- · ADR/RID/ADN, ADN, IMDG, IATA
- · Class Void

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· 14.4 Packing group · ADR/RID/ADN, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Anno Marpol and the IBC Code	ex II of Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · National regulations:
- · Information about limitation of use:

Employment restrictions concerning juveniles must be observed.

Employment restrictions concerning pregnant and lactating women must be observed.

- · Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H318 Causes serious eye damage.

· Department issuing SDS:

Product Safety Department E-Mail: msds@munzing.com

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

VOC: Volatile Organic Compounds (USA, EU) DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

- EN