Safety data sheet

Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)
Date / Revised: 02.12.2024 Version: 1.0
Product: **Basorol® PE 10500**

(ID no. 30434551/SDS_GEN_ZA/EN)
Date of print 30.10.2025

1. Identification

Product identifier

Basorol® PE 10500

Chemical name: Oxirane, methyl-, polymer with oxirane
CAS Number: 9003-11-6

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

Relevant identified uses: Performance Chemicals for Oilfield Applications

Details of the supplier of the safety data sheet

Company:

Emergency telephone number

National emergency number:
+27 11 203 2420
International emergency number:
Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

Label elements

Globally Harmonized System (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards

According to UN GHS criteria

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition/Information on Ingredients

Substances

Chemical nature

Oxirane, methyl-, polymer with oxirane
CAS Number: 9003-11-6

Mixtures

Not applicable

4. First-Aid Measures

Description of first aid measures

Remove contaminated clothing. If adverse health effects develop seek medical attention.

If inhaled:
Keep patient calm, remove to fresh air.

On skin contact:
Wash thoroughly with soap and water

On contact with eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:
Rinse mouth and then drink 200-300 ml of water.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Special hazards arising from the substance or mixture

harmful vapours, carbon oxides
Generation of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Forms slippery surfaces with water.

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Use personal protective clothing. Information regarding personal protective measures, see section 8.

For emergency responders: Take appropriate protective measures.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Pick up with suitable appliance and dispose of.
Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

No eating, drinking, smoking or tobacco use at the place of work. Wash hands before breaks and at end of work. Remove contaminated clothing and protective equipment before entering eating areas.

Protection against fire and explosion:
No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Stove-lacquer RDL 50, Stainless steel 1.4301 (V2), Stainless steel 1.4306 (V2A), Stainless steel 1.4361, Stainless steel 1.4401, Stainless steel 1.4541, Stainless steel 1.4571, Stainless steel 1.4439, Stainless steel 1.4539
Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

The packed product is not damaged by low temperatures or by frost. Bulk must be protected from solidification.
Protect from temperatures above: 70 °C
Properties of the product change reversibly on exceeding the limit temperature.

8. Exposure Controls/Personal Protection

Control parameters

Components with occupational exposure limits

No substance specific occupational exposure limits known.

Exposure controls

Personal protective equipment

Respiratory protection:
Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1or FFP1)

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
nitrile rubber (NBR) - 0.4 mm coating thickness
Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.
Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures
Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	solid	
Form:	waxy type	
Colour:	colourless to yellowish	
Odour:	product specific	
solidification temperature:	approx. 44 °C	(DIN ISO 2207)
Boiling point:	> 250 °C	(estimated)
Flammability:	Based on the structure or composition there is no indication of flammability	
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Flash point:	280 °C	(ISO 2719)
Auto-ignition temperature:	> 300 °C	(other)
Thermal decomposition:	> 300 °C (DTA)	
pH value:	approx. 7 (50 g/l, 23 °C)	(DIN EN 1262)
Viscosity, kinematic:	not applicable, the product is a solid	
Viscosity, dynamic:	800 mPa.s (50 °C)	
Solubility in water:	soluble	
Solubility (qualitative) solvent(s):	distilled water, aromatic hydrocarbons, Ethanol, Propan-2-ol	
	soluble	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Vapour pressure:	< 0.1 hPa (20 °C)	(estimated)
Density:	approx. 1.03 g/cm3 (60 °C)	(DIN 51757)
Relative vapour density (air):	not determined	

Particle characteristics
Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

9.2. Other information

Information with regard to physical hazard classes

Explosives
Explosion hazard: not explosive
Oxidizing properties
Fire promoting properties: not fire-propagating
Self-heating substances and mixtures
Self heating ability: It is not a substance capable of spontaneous heating.
Corrosion to metals

Corrosive effects to metal are not anticipated.

Other safety characteristics

Bulk density:
not applicable
Miscibility with water:
miscible in all proportions
Hygroscopy: The product has not been tested.
Surface tension: 37.4 mN/m (DIN EN 14370)
(23 °C; 0.5 g/l)
Other Information: If necessary, information on other physical and chemical parameters is indicated in this section.
SAPT-Temperature:
Product does not fulfil criteria for polymerizing substances according to transport regulations. - The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.
Evaporation rate:
The product is a non-volatile solid.

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

caustics, halogens, Alkalines, acids, reactive chemicals, strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products:
No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:
Virtually nontoxic after a single ingestion.

Experimental/calculated data:
LD50 rat (oral): > 5,000 mg/kg (OECD Guideline 401)

LC50 rat (by inhalation): > 1,37 mg/l 4 h (OECD Guideline 403)
Highest concentration technically achievable. No mortality was observed.

LD50 rat (dermal):
not determined

Irritation

Assessment of irritating effects:
Not irritating to eyes and skin.

Experimental/calculated data:
Skin corrosion/irritation rabbit: non-irritant (Draize test)

Serious eye damage/irritation rabbit: non-irritant (Draize test)

Respiratory/Skin sensitization

Assessment of sensitization:
No sensitizing effect.

Experimental/calculated data:
In vitro assay: Non-sensitizing. (OECD Guideline 442D)

Germ cell mutagenicity

Assessment of mutagenicity:
The substance was not mutagenic in bacteria.

Experimental/calculated data:
Bacteria: negative (OECD Guideline 471)

Carcinogenicity

Assessment of carcinogenicity:
Not classified, due to lack of data.

Reproductive toxicity

Assessment of reproduction toxicity:
Not classified, due to lack of data.

Developmental toxicity

Assessment of teratogenicity:
Not classified, due to lack of data.

Specific target organ toxicity (single exposure)

Remarks: No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:
Not classified, due to lack of data.

Aspiration hazard

not applicable

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

Toxicity to fish:
LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 92/69/EWG, C.1)

Aquatic invertebrates:
EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants:
EC50 (72 h), algae
not determined

Microorganisms/Effect on activated sludge:
EC50 (0.5 h), bacteria
not determined

Chronic toxicity to fish:
No data available.

Chronic toxicity to aquatic invertebrates:
No data available.

Assessment of terrestrial toxicity:
No data available concerning terrestrial toxicity.

Persistence and degradability

Assessment biodegradation and elimination (H2O):
Not readily biodegradable (by OECD criteria). is partially eliminated in sewage treatment plants

Elimination information:
10 - 20 % CO2 formation relative to the theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EWG, C.4-C) (aerobic)

Bioaccumulative potential

Assessment bioaccumulation potential:
Based on its structural properties, the polymer is not biologically available. Accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments:
Volatility: The substance will not evaporate into the atmosphere from the water surface.
Adsorption in soil: Adsorption to solid soil phase is possible.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

Additional information

Add. remarks environm. fate & pathway:
Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal Considerations

Waste treatment methods

Must be disposed of or incinerated in accordance with local regulations.
No disposal via sewage or waste water systems.

Contaminated packaging:
Uncontaminated packaging can be re-used.
Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport
ADN

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Air transport

IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number or ID number	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information

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

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

16. Other Information

Not to be used as an aerosol.

Information on intended use: This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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