



We create chemistry

Safety Data Sheet

Lupasol® SK

Revision date : 2020/04/28

Version: 5.0

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## 1. Identification

Product identifier used on the label

**Lupasol® SK**

Recommended use of the chemical and restriction on use

Recommended use\*: formulation auxiliary for the chemical industry

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: polyethyleneimine, modified, in water

## 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

Aquatic Acute 3  
Aquatic Chronic 3

Hazardous to the aquatic environment - acute  
Hazardous to the aquatic environment - chronic

Label elements

Hazard Statement:

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H402

Harmful to aquatic life.

H412

Harmful to aquatic life with long lasting effects.

## Precautionary Statements (Prevention):

P273

Avoid release to the environment.

## Precautionary Statements (Disposal):

P501

Dispose of contents and container to hazardous or special waste collection point.

## Hazards not otherwise classified

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

## 3. Composition / Information on Ingredients

### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Proprietary polymer

CAS Number: Trade Secret

Content (W/W):  $\geq 20.0$  -  $< 25.0\%$

Synonym: No data available.

## 4. First-Aid Measures

### Description of first aid measures

#### General advice:

Remove contaminated clothing.

#### If inhaled:

Keep patient calm, remove to fresh air. Assist in breathing if necessary. Seek medical attention.

#### If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

#### If in eyes:

Flush with copious amounts of water for at least 15 minutes. Hold eyelids open to facilitate rinsing. If irritation develops, seek medical attention.

#### If swallowed:

Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions.

## Most important symptoms and effects, both acute and delayed

Symptoms: No data available.

Hazards: No hazard is expected under intended use and appropriate handling.

## Indication of any immediate medical attention and special treatment needed

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### Note to physician

Treatment:

Treat according to symptoms (decontamination, vital functions), no known specific antidote.

## 5. Fire-Fighting Measures

### Extinguishing media

Suitable extinguishing media:  
water spray, dry powder, foam, carbon dioxide

Unsuitable extinguishing media for safety reasons:  
No data available.

### Special hazards arising from the substance or mixture

Hazards during fire-fighting:  
No particular hazards known.

### Advice for fire-fighters

Protective equipment for fire-fighting:  
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

### Further information:

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

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

## 7. Handling and Storage

### Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Wear suitable gloves and eye/face protection.

Protection against fire and explosion:  
No special precautions necessary.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:  
Storage temperature: 5 - 35 °C  
The stated storage temperature should be noted.

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### 8. Exposure Controls/Personal Protection

No occupational exposure limits known.

#### Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

#### Personal protective equipment

##### Respiratory protection:

Respiratory protection not required.

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

##### Hand protection:

Chemical resistant protective gloves, rubber, plastic

##### Eye protection:

Safety glasses with side-shields.

##### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

##### General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Wash soiled clothing immediately.

### 9. Physical and Chemical Properties

Form:	liquid	
Odour:	ether-like	
Odour threshold:	No applicable information available.	
Colour:	yellowish	
pH value:	7.8 - 8.7	(DIN 19268)
	(measured with the undiluted substance)	
solidification temperature:	approx. -5 °C	
Boiling point:	approx. 100 °C	
Sublimation point:	No applicable information available.	
Flash point:	> 100 °C	(DIN 51758)
Flammability:	not flammable	(derived from flash point)
Lower explosion limit:	For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	380 °C	(DIN 51794)
Vapour pressure:	120 mbar ( 50 °C)	

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Density:	approx. 1.06 g/cm <sup>3</sup> ( 20 °C)
Relative density:	No data available.
Vapour density:	No data available.
Partitioning coefficient n-octanol/water (log Pow):	not determined
Self-ignition temperature:	not self-igniting
Thermal decomposition:	No decomposition if correctly stored and handled.
Viscosity, dynamic:	500 - 1,000 mPa.s ( 20 °C) (DIN EN ISO 2555)
Viscosity, kinematic:	No applicable information available.
% volatiles:	0.0 % Surface Coatings - Volatile Matter Content
Solubility in water:	( 20 °C) soluble
Miscibility with water:	completely (e.g. >=90%)
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Molar mass:	No data available.
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.

## 10. Stability and Reactivity

### Reactivity

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

Corrosion to metals:

No corrosive effect on metal.

Oxidizing properties:

not fire-propagating

### Chemical stability

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

### Possibility of hazardous reactions

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

### Conditions to avoid

No special precautions other than good housekeeping of chemicals.

### Incompatible materials

No substances known that should be avoided.

### Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No decomposition if correctly stored and handled.

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### 11. Toxicological information

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### Acute Toxicity/Effects

##### Acute toxicity

Assessment of acute toxicity: The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard. Virtually nontoxic after a single ingestion.

##### Oral

Type of value: LD50

Species: rat (male/female)

Value: 13,400 mg/kg (BASF-Test)

##### Inhalation

Species: rat

Value: (IRT)

Exposure time: 8 h

No mortality within the stated exposition time as shown in animal studies.

##### Dermal

No applicable information available.

##### Assessment other acute effects

No applicable information available.

##### Irritation / corrosion

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

##### Skin

Species: rabbit

Result: non-irritant

Method: Draize test

##### Eye

Species: rabbit

Result: non-irritant

Method: Draize test

##### Sensitization

Assessment of sensitization: Based on the ingredients, there is no suspicion of a skin-sensitizing potential.

##### Aspiration Hazard

No aspiration hazard expected.

#### Chronic Toxicity/Effects

##### Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure to the substance by oral administration leads to effects similar to those found after single exposure.

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### Genetic toxicity

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

### Carcinogenicity

Assessment of carcinogenicity: None of the components in this product at concentrations greater than 0.1% are listed by IARC; NTP, OSHA or ACGIH as a carcinogen.

### Reproductive toxicity

Assessment of reproduction toxicity: No data available.

### Teratogenicity

Assessment of teratogenicity: No data available.

## 12. Ecological Information

### **Toxicity**

#### Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Acute effects on aquatic organisms are due to cationic charge, which is likely to be neutralized in natural water courses by anionic species.

#### Toxicity to fish

LC50 (96 h) 33 mg/l, Brachydanio rerio (OECD 203; ISO 7346; 92/69/EEC, C.1, static)

Nominal concentration.

#### Aquatic invertebrates

EC50 (48 h) 19.8 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Nominal concentration.

### **Microorganisms/Effect on activated sludge**

#### Toxicity to microorganisms

OECD Guideline 209 aerobic

activated sludge/EC20 (30 min): 100 - 1,000 mg/l

### **Persistence and degradability**

#### Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria). Poorly biodegradable.

#### Elimination information

< 10 % BOD of the ThOD (29 d) (OECD Guideline 301 F) (aerobic)

### **Bioaccumulative potential**

#### Bioaccumulation potential

No data available.

### **Mobility in soil**

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### Assessment transport between environmental compartments

No data available.

### **Additional information**

Other ecotoxicological advice:

Do not allow to enter soil, waterways or waste water channels. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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## 13. Disposal considerations

### **Waste disposal of substance:**

Incinerate or dispose of in a licensed facility. Do not discharge into drains/surface waters/groundwater.

### **Container disposal:**

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

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## 14. Transport Information

### **Land transport**

USDOT

Not classified as a dangerous good under transport regulations

### **Sea transport**

IMDG

Not classified as a dangerous good under transport regulations

### **Air transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations

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## 15. Regulatory Information

### **VOC content:**

Surface Coatings - Volatile Matter Content

### **Federal Regulations**

### **Registration status:**

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

### **NFPA Hazard codes:**

Health: 1 Fire: 0 Reactivity: 0 Special:

### **HMIS III rating**



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Health: 1 Flammability: 1 Physical hazard: 0

### 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2020/04/28

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