

# Safety Data Sheet

## Lupasol® G 35

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Version: 1.0

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(30048281/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

## Lupasol® G 35

#### Recommended use of the chemical and restriction on use

Recommended use\*: Chemical

\* The "Recommended use" identified for this product is provided solely to comply with a US 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, polyamine

### 2. Hazards Identification

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

#### Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
Skin Sens.	1B	Skin sensitization
Aquatic Acute	2	Hazardous to the aquatic environment - acute
Aquatic Chronic	2	Hazardous to the aquatic environment - chronic

#### Label elements

Pictogram:

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Signal Word:  
Danger

### Hazard Statement:

H318	Causes serious eye damage.
H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

### Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
P264	Wash with plenty of water and soap thoroughly after handling.

### Precautionary Statements (Response):

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 or doctor/physician.
P303 + P362	IF ON SKIN (or hair): Wash with plenty of soap and water.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330	Rinse mouth.
P362 + P364	Take off contaminated clothing and wash before reuse.
P391	Collect spillage.

### Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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### Hazards not otherwise classified

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

**According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

### Emergency overview

#### WARNING:

HARMFUL IF SWALLOWED.

Causes eye irritation.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

Use with local exhaust ventilation.

Avoid contact with the skin, eyes and clothing.

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

Avoid inhalation of mists/vapours.

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

Eye wash fountains and safety showers must be easily accessible.

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### 3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
9002-98-6	>= 40.0 - <= 50.0 %	polyethyleneimine

**According to Regulation 1994 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200**

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
9002-98-6	>= 40.0 - <= 50.0 %	polyethyleneimine

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

Remove contaminated clothing.

##### If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

##### If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

##### If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

##### If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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

##### 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

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### Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

### Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus in confined areas or when exposed to combustion products.

### Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.

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## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

### Environmental precautions

Do not discharge into drains/surface waters/groundwater.

### Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).

Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

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

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## 7. Handling and Storage

### Precautions for safe handling

Keep container tightly closed. Protect from the effects of light.

Protection against fire and explosion:

No special precautions necessary.

### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Store protected against freezing.

Protect from temperatures above: 40 °C

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## 8. Exposure Controls/Personal Protection

### Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

### Personal protective equipment

#### Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

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### Hand protection:

Chemical resistant protective gloves

### Eye protection:

Tightly fitting safety goggles (chemical goggles).

### General safety and hygiene measures:

Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing.

## 9. Physical and Chemical Properties

Form:	liquid	
Odour:	product specific	
Colour:	colourless to yellowish	
pH value:	approx. 11	( 1 %(m)) (DIN 19268)
solidification temperature:	approx. -20 °C	(DIN ISO 3013)
boiling temperature:	approx. 100 °C	
Flash point:	> 100 °C	(DIN 51758)
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	23.4 mbar	( 20 °C)
<i>Information on: Water</i>		
Vapour pressure:	23 hPa	( 20 °C)
-----		
Density:	approx. 1.08 g/cm <sup>3</sup>	( 20 °C) (DIN 51757)
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Self-ignition temperature:		not self-igniting
Viscosity, dynamic:	approx. 2,000 mPa.s	( 20 °C)
Solubility in water:		miscible
Miscibility with water:		miscible
Evaporation rate:		No data available.
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 when stored and handled according to instructions.

The product is chemically stable.

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### Conditions to avoid

No conditions known that should be avoided.

### Incompatible materials

aldehydes, ketones, chlorinated hydrocarbons, strong acids

### Hazardous decomposition products

Decomposition products:

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

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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

#### Oral

Type of value: LD50

Species: rat

Value: > 300 - 2,000 mg/kg

#### Skin

Species: rabbit

Result: non-irritant

Method: Draize test

#### Eye

Species: rabbit

Result: Risk of serious damage to eyes.

#### Sensitization

Assessment of sensitization: May cause sensitization by skin contact. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

### Chronic Toxicity/Effects

### Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., Further important symptoms and effects are so far not known.

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## 12. Ecological Information

### Toxicity

#### Toxicity to fish

LC50 (96 h) > 1 - 10 mg/l, *Leuciscus idus*

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### Microorganisms/Effect on activated sludge

#### Toxicity to microorganisms

DIN 38412 Part 27 (draft) bacteria/EC10 (0.5 h): 0.4 mg/l

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

### Persistence and degradability

#### Elimination information

Poorly biodegradable.

Well eliminable from water by adsorption on activated sludge.

### Additional information

#### Sum parameter

Chemical oxygen demand (COD): 950 mg/g

Other ecotoxicological advice:

Do not allow to enter soil, waterways or waste water channels.

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## 13. Disposal considerations

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

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

#### **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

Hazard class:	9
Packing group:	III
ID number:	UN 3082
Hazard label:	9, EHSM
Marine pollutant:	YES
Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (contains POLYETHYLENEIMINE)

#### **Air transport**

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IATA/ICAO

Hazard class: 9

Packing group: III

ID number: UN 3082

Hazard label: 9, EHS

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,  
N.O.S. (contains POLYETHYLENEIMINE)

## 15. Regulatory Information

### Federal Regulations

#### Registration status:

Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Acute;

#### CERCLA RQ

100 LBS

1 LBS

#### CAS Number

107-06-2

151-56-4

#### Chemical name

1,2-dichloroethane

ethylenimine

### State regulations

#### CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

#### NFPA Hazard codes:

Health : 3 Fire: 1 Reactivity: 0 Special:

#### HMIS III rating

Health: 3 Flammability: 1 Physical hazard: 0

## 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2015/03/06

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