



We create chemistry

Safety Data Sheet

Lupasol® HF

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(30048282/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Lupasol® HF

Recommended use of the chemical and restriction on use

Recommended use*: Raw material for the chemical-technical industry

Unsuitable for use: Not intended for sale to or use by the general public.

* 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 Canada Inc.

5025 Creekbank Road

Building A, Floor 2

Mississauga, ON, L4W 0B6, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

24 Hour Emergency Response Information

CHEMTREC: 1-800-424-9300

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Substance number: 18651

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2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

Acute Tox.	4 (oral)	Acute toxicity
Eye Dam./Irrit.	2A	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:

Signal Word:
Warning

Hazard Statement:

H319	Causes serious eye irritation.
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 protection or 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 contaminated body parts thoroughly after handling.

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Precautionary Statements (Response):

P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P301 + P330	IF SWALLOWED: rinse mouth.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P391	Collect spillage.
P337 + P311	If eye irritation persists: Call a POISON CENTER or physician.

Precautionary Statements (Disposal):

P501	Dispose of contents and 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.

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 55 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 55 % Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 55 % Inhalation - mist

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Polyethyleneimine

CAS Number: 9002-98-6

Content (W/W): ≥ 50.0 - $< 75.0\%$

Synonym: No data available.

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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.

If on skin:

Wash thoroughly with soap and water

If in eyes:

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

Information on: Polyethyleneimine

Symptoms: Eye irritation, chest discomfort, coughing, itching

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.

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5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
harmful vapours, nitrogen oxides, carbon oxides
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:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

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

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

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

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stainless steel 1.4401, glass, High density polyethylene (HDPE)

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

Protect from temperatures above: 40 °C

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Personal protective equipment

Respiratory protection:

Respiratory protection in case of vapour/aerosol release. Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Wear chemically impervious protective gloves.

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

Body protection:

Body protection must be chosen based on level of activity and exposure.

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General safety and hygiene measures:

Wearing of closed work clothing is required additionally to the stated personal protection equipment.
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

Form:	liquid	
Odour:	No data available.	
Odour threshold:	not determined	
Colour:	colourless to yellowish	
pH value:	11 - 12 (1 %(m), 20 °C)	(DIN 19268)
solidification temperature:	approx. -20 °C	
Boiling point:	approx. 100 °C Information applies to the solvent.	
Flash point:	> 200 °C	(DIN ISO 2592)
Flammability:	not self-igniting	
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	24 mbar (20 °C)	
Density:	contains water approx. 1.08 g/cm ³ (20 °C)	(DIN 51757)
Relative density:	No data available.	
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	> 250 °C	

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Viscosity, dynamic:	approx. 11,000 mPa.s (20 °C)
Particle size:	The substance / product is marketed or used in a non solid or granular form.
Solubility in water:	fully soluble
Solubility (qualitative):	solvent(s): distilled water, alcohols, Methanol, Ethanol, 1- Propanol, 2-Propanol
Evaporation rate:	not determined
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.

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.

Conditions to avoid

See SDS section 7 - Handling and storage.

Incompatible materials

strong oxidizing agents, strong bases, strong acids, reactive chemicals, water reactive substances

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:
> 250 °C

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: Harmful if swallowed.

Oral

Type of value: LD50

Species: rat

Value: > 300 - < 2,000 mg/kg

Dermal

Type of value: ATE

Value: > 5,000 mg/kg

Assessment other acute effects

No data available.

Irritation / corrosion

Assessment of irritating effects: Contact may result in eye irritation. Inhalation of vapours or aerosols may cause respiratory tract irritation.

Skin

Species: rabbit

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Result: non-irritant
Method: BASF-Test

Eye

Species: rabbit
Result: Irritant.
Method: OECD Guideline 405

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Guinea pig maximization test
Species: guinea pig
Result: Caused skin sensitization in animal studies.
Method: OECD Guideline 406

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

Genetic toxicity

Assessment of mutagenicity: No data available.

Carcinogenicity

Assessment of carcinogenicity: No data available.

Reproductive toxicity

Assessment of reproduction toxicity: No data available.

Teratogenicity

Assessment of teratogenicity: No data available.

Other Information

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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12. Ecological Information

Toxicity

Toxicity to fish

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

Aquatic invertebrates

LC50 (48 h), daphnia
not determined

Aquatic plants

EC50 (72 h), algae
not determined

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

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

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Not readily biodegradable (by OECD criteria).

Elimination information

Well eliminable from water by adsorption on activated sludge.

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Bioaccumulative potential

Assessment bioaccumulation potential

Significant accumulation in organisms is not to be expected.

Mobility in soil

Assessment transport between environmental compartments

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is possible.

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 allow to enter soil, waterways or waste water channels.

The product has not been tested. The statements on ecotoxicology have been derived from products of a similar structure and composition.

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 accordance with national, state and local regulations.

14. Transport Information

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Land transport

TDG

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)

Sea transport

IMDG

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

Air transport

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 DSL, CA released / listed



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16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2020/08/20

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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