

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16

Version: 6.0

Page: 1/11

(30262706/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Lupasol® PN 60

Recommended use of the chemical and restriction on use

Recommended use*: formulation auxiliary for the chemical industry

Recommended use*: Chemical

Suitable for use in industrial sector: 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: polyamine, modified, in water

2. Hazards Identification

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

Classification of the product

Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Aquatic Chronic	3	Hazardous to the aquatic environment - chronic

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 2/11
(30262706/SDS_GEN_US/EN)

Label elements

Pictogram:



Signal Word:
Warning

Hazard Statement:

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H335	May cause respiratory irritation.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves and eye/face protection.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P362	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
------	---

Hazards not otherwise classified

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

3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
79-10-7	>= 0.0 - < 3.0%	acrylic acid
7446-81-3	>= 0.0 - < 1.0%	sodium acrylate
	>= 25.0 - <= 50.0%	Polyamine, modified

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 3/11
(30262706/SDS_GEN_US/EN)

4. First-Aid Measures

Description of first aid measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately 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

Symptoms: Additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

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

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, carbon oxides, nitrogen oxides, chlorine compounds

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.

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 4/11
(30262706/SDS_GEN_US/EN)

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

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.

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: High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4541, Stainless steel 1.4571, glass, Stove-lacquer RDL 50

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

The packed product is not damaged by low temperatures or by frost.

Protect from temperatures above: 40 °C

Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

acrylic acid	OSHA PEL	SKIN_FINAL ; The substance can be absorbed through the skin.
	ACGIH TLV	TWA value 10 ppm 30 mg/m3 ; TWA value 2 ppm ; Skin Designation ; The substance can be absorbed through the skin.

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16

Version: 6.0

Page: 5/11

(30262706/SDS_GEN_US/EN)

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Chemical resistant 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.

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:	aqueous solution	
Odour:	product specific	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	yellow	
pH value:	approx. 4 (10 %(m))	(DIN 19268)
pour point:	approx. -10 °C	(DIN ISO 3016)
Boiling point:	approx. 100 °C (1,013 hPa) contains water	
Flash point:	No flash point - Measurement made up to pilot light extinguishes.	(DIN EN 22719; ISO 2719)
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	Based on the water content the product does not ignite.	
Vapour pressure:	24 mbar (20 °C) contains water	
Density:	approx. 1.13 g/cm3 (20 °C)	(DIN 51757)
	approx. 1.13 g/cm3 (25 °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:	> 260 °C	
Viscosity, dynamic:	approx. 390 mPa.s (20 °C)	(DIN EN 12092)
	approx. 370 mPa.s (25 °C)	(DIN EN 12092)

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 6/11
(30262706/SDS_GEN_US/EN)

	approx. 170 mPa.s (50 °C)	(DIN EN 12092)
	approx. 130 mPa.s (60 °C)	(DIN EN 12092)
Particle size:	The substance / product is marketed or used in a non solid or granular form.	
Solubility in water:	soluble	
Solubility (qualitative):	soluble	
	solvent(s): hydrochloric acid, Sodium Hydroxide	
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.

Oxidizing properties:

not fire-propagating

Formation of

flammable gases:

Remarks:

Forms no flammable gases in the presence of water.

Chemical stability

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

Peroxides:

The product does not contain peroxides.

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

carbon steel (iron), light metals, strong bases, strong acids, mild steel, reactive chemicals, water reactive substances

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

> 260 °C

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 7/11
(30262706/SDS_GEN_US/EN)

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: Virtually nontoxic after a single ingestion.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 423)

Inhalation

Type of value: LC50

Species: rat

not determined

Dermal

Type of value: LD50

Species: rat

not determined

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation.

Skin

Species: rabbit

Result: Irritant.

Method: other

Eye

Species: rabbit

Result: Irritant.

Method: other

Sensitization

Assessment of sensitization: No data available.

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: Based on available Data, the classification criteria are not met.

Carcinogenicity

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16

Version: 6.0

Page: 8/11

(30262706/SDS_GEN_US/EN)

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 statements on toxicology have been derived from the properties of the individual components.

Symptoms of Exposure

Additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., (Further) symptoms and / or effects are not known so far

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

The chronic aquatic risk classification is based on acute aquatic toxicity study data and the environmental fate properties of the product.

Toxicity to fish

LC50 (96 h), Fish
not determined

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1)
Nominal concentration.

Aquatic plants

EC50 (72 h) > 10 - < 100 mg/l (growth rate), Desmodesmus subspicatus (OECD Guideline 201)

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

bacteria/EC50 (0.5 h):
not determined

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Moderately/partially eliminated from water. Elimination by adsorption onto activated sludge

Mobility in soil

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 9/11
(30262706/SDS_GEN_US/EN)

Assessment transport between environmental compartments
not determined

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:

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

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.

RCRA: None

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

15. Regulatory Information

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.

EPCRA 313:

CAS Number

Chemical name

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16
Version: 6.0

Page: 10/11
(30262706/SDS_GEN_US/EN)

79-10-7 acrylic acid

CERCLA RQ

5000 LBS
100 LBS
10 LBS
1 LBS

CAS Number

79-10-7
106-89-8
75-21-8
151-56-4

Chemical name

acrylic acid
1-chloro-2,3-epoxypropane
Ethylene Oxide
ethylenimine

State regulations

State RTK

NJ
PA

CAS Number

79-10-7
79-10-7

Chemical name

acrylic acid
acrylic acid

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including EPICHLOROHYDRIN, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 2 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2019/08/16

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.

Lupasol® PN 60 is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO

Safety Data Sheet

Lupasol® PN 60

Revision date : 2019/08/16

Page: 11/11

Version: 6.0

(30262706/SDS_GEN_US/EN)

OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION
GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET