We create chemistry

Safety Data Sheet
Luprosil®

1. Identification

Product identifier used on the label

Luprosil®

Recommended use of the chemical and restriction on use

Recommended use*: feed additive(s)

* 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

Chemical family: No data available.
Synonyms: Propionic Acid. Use: industrial chemical, feed additive

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

Classification of the product

Flam. Liq.	3	Flammable liquids
Skin Corr.	1B	Skin corrosion
Eye Dam.	1	Serious eye damage
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure

Label elements

Pictogram:

Signal Word:
Danger

Hazard Statement:

H226	Flammable liquid and vapour.
H335	May cause respiratory irritation.
H314	Causes severe skin burns and eye damage.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243	Take action to prevent static discharges.
P260	Do not breathe mist or vapour or spray.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P264	Wash contaminated body parts thoroughly after handling.
P240	Ground and bond container and receiving equipment.
P242	Use non-sparking tools.

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 physician.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use water spray, dry powder, foam or carbon dioxide for extinction.

Precautionary Statements (Storage):

P233	Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.

Precautionary Statements (Disposal):

P501	Dispose of contents/container in accordance with local regulations.

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 Hazardous Products Regulations (HPR) (SOR/2022-272)

propionic acid
CAS Number: 79-09-4
Content (W/W): >= 99.5 - <= 100.0%
Synonym: Propanoic acid; Propionic acid

Acetic acid
CAS Number: 64-19-7
Content (W/W): >= 0.1 - <= 1.0%
Synonym: Acetic acid; Glacial acetic acid

4. First-Aid Measures

Description of first aid measures

General advice:
Remove contaminated clothing.

If inhaled:
Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:
Wash affected areas thoroughly with soap and water. Remove contaminated clothing. If irritation develops, seek medical attention.

If in eyes:
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing. Seek medical attention.

If swallowed:
Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. 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.

Information on: propionic acid
Symptoms: Overexposure may cause:, asthma, coughing

Hazards: No applicable information available.

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

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

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture
Hazards during fire-fighting:
carbon oxides, nitrogen oxides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters
Protective equipment for fire-fighting:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems.

Impact Sensitivity:
Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures
Personal protection: wear a tightly closed chemical protection suit and a self-contained breathing apparatus. Wear acid-resistant boots.

Environmental precautions
Do not empty into drains.

Methods and material for containment and cleaning up
For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling
Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. Change clothes immediately after contamination.

Protection against fire and explosion:
Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

Conditions for safe storage, including any incompatibilities
Segregate from alkalies and alkalizing substances.

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Acetic acid	ACGIH, US:	STEL value 15 ppm ;
	ACGIH, US:	TWA value 10 ppm ;
	OSHA Z1:	PEL 10 ppm 25 mg/m3 ;
propionic acid	ACGIH, US:	TWA value 10 ppm ;

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) acid gas/organic vapour respirator. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination. For emergency or non-routine, high exposure situations, use a NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions.

Hand protection:
Chemical resistant protective gloves should be worn to prevent all skin contact., Consult with glove manufacturer for testing data., Protective glove selection must be based on the user's assessment of the workplace hazards.

Eye protection:
Tightly fitting safety goggles (chemical goggles) and face shield.

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:
Avoid contact with the skin, eyes and clothing. Avoid inhalation of vapour. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Physical state:	liquid
Form:	liquid
Odour:	pungent odour
Odour threshold:	not determined

Colour:	colourless	
pH value:	2.5 (100 g/l, 20 °C) Literature data.	
Melting point:	-20 °C	
Freezing point:	No data available.	
Boiling point:	140.7 - 141.6 °C	
Sublimation point:	No applicable information available.	
Flash point:	53 °C	(ISO 13736, closed cup)
Flammability:	Flammable liquid and vapour.	(derived from flash point)
Lower explosion limit:	2.1 %(V) (46.9 °C) The lower explosion point of the substance/mixture has been determined. The explosion point describes the temperature of a flammable liquid at which the concentration of the saturated vapour mixed with air equals the lower explosion limit.	
Upper explosion limit:	12.0 %(V)	
Heat of Combustion:	20.63 kJ/g	
Autoignition:	485 °C	(DIN 51794)
SADT:	Not a substance/mixture liable to self-decomposition according to GHS.	
Vapour pressure:	5 mbar (20 °C) approx. 23 hPa (50 °C)	
Density:	0.993 g/cm3 (20 °C) Literature data. 0.957 g/cm3 (55 °C) Literature data. 0.9990 g/cm3 (15 °C) 0.9610 g/cm3 (50 °C)	
Relative density:	No data available.	
Relative vapour density:	> 1 (20 °C) Heavier than air.	(estimated)
Partitioning coefficient n-octanol/water (log Pow):	0.25 (25 °C) 0.33	(Calculation Hansch/Leo)
Self-ignition temperature:	Based on its structural properties the product is not classified as self-igniting.	
Thermal decomposition:	not determined	
Viscosity, dynamic:	1.102 mPa.s (20 °C) Literature data.	

Viscosity, kinematic:	No data available.
Solubility in water:	(20 °C) miscible
Solubility (quantitative):	No data available.
Solubility (qualitative):	No data available.
Molecular weight:	74.08 g/mol
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.

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

10. Stability and Reactivity

Reactivity
No applicable information available.

Corrosion to metals:
Corrosive effects to metal are not anticipated. In the presence of water or moisture metal corrosion cannot be excluded.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.

Formation of flammable gases:	Remarks:	Forms no flammable gases in the presence of water.

Chemical stability
The product is chemically stable.

Possibility of hazardous reactions
Reacts with strong alkalies. Exothermic reaction.

Conditions to avoid
No conditions to avoid anticipated.

Incompatible materials
bases

Hazardous decomposition products

Decomposition products:
No hazardous decomposition products known.

Thermal decomposition:
not determined

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: Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Of low toxicity after short-term skin contact. Inhalation-risk test (IRT): No mortality within 8 hours as shown in animal studies. The inhalation of a highly saturated vapor-air mixture represents no acute hazard.

Oral
Type of value: LD50
Species: rat (male/female)
Value: 3,455 mg/kg (similar to OECD guideline 401)

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 19.7 mg/l (OECD Guideline 403)
Exposure time: 1 h
The vapour was tested.

Type of value: LC0
Species: rat (male/female)
Value: 24.4 mg/l (IRT)
Exposure time: 8 h
The vapour was tested.
Literature data. No mortality within the stated exposition time as shown in animal studies.

Dermal
Type of value: LD50
Species: rat (female)
Value: 3,235 mg/kg (similar to OECD guideline 402)

Assessment other acute effects
Assessment of STOT single:
Causes temporary irritation of the respiratory tract.

Irritation / corrosion
Assessment of irritating effects: Corrosive! Damages skin and eyes.

Skin
Species: rabbit
Result: Corrosive.
Method: BASF-Test

Eye
Species: rabbit
Result: irreversible damage
Method: Draize test
Literature data.

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: similar to OECD guideline 406
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: No substance-specific organtoxicity was observed after repeated administration to animals. After repeated administration the prominent effect is the induction of corrosion.

Genetic toxicity
Assessment of mutagenicity: The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in studies with mammals. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Carcinogenicity
Assessment of carcinogenicity: In long-term animal studies in which the substance was given in high concentrations by feed, a carcinogenic effect was not observed.

Reproductive toxicity
Assessment of reproduction toxicity: No data available. Study scientifically not justified.

Teratogenicity
Assessment of teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Medical conditions aggravated by overexposure
Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish
LC50 (96 h) > 10,000 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

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

Aquatic invertebrates
EC50 (48 h) > 500 mg/l, Daphnia magna (Directive 84/449/EEC, C.2, static)
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) > 500 mg/l (biomass), Scenedesmus subspicatus (OECD Guideline 201, static)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to fish
Study scientifically not justified.

Chronic toxicity to aquatic invertebrates
Study scientifically not justified.

Assessment of terrestrial toxicity
Toxic effects have been observed in studies with terrestric plants.

Soil living organisms

Toxicity to soil dwelling organisms:
No data available.

Toxicity to terrestrial plants

EC50 (3 d) 125.8 mg/l 188.7 mg/kg, Lactuca sativa
Literature data.

Other terrestrial non-mammals
No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
DIN EN ISO 8192 aquatic
activated sludge, domestic/EC20 (30 min): 500 - 1,040 mg/l
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Persistence and degradability

Assessment biodegradation and elimination (H2O)
Readily biodegradable (according to OECD criteria). Literature data.

Elimination information

approx. 74 % BOD of the ThOD (30 d) (other) (aerobic, activated sludge, domestic)

Assessment of stability in water
According to structural properties, hydrolysis is not expected/probable.

Information on Stability in Water (Hydrolysis)

The product has not been tested. The statement has been derived from the structure of the product.

Bioaccumulative potential

Assessment bioaccumulation potential
Significant accumulation in organisms is not to be expected.

Bioaccumulation potential
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 not expected.

Additional information

Sum parameter

Chemical oxygen demand (COD): 1,520 mg/g

Biochemical oxygen demand (BOD) Incubation period 5 d: 1,300 mg/g

13. Disposal considerations

Waste disposal of substance:
Incinerate in suitable incineration plant, observing local authority regulations.

14. Transport Information

Land transport
TDG

Hazard class:	8
Packing group:	II
ID number:	UN 3463
Hazard label:	8, 3
Proper shipping name:	PROPIONIC ACID

Sea transport
IMDG

Hazard class:	8
Packing group:	II
ID number:	UN 3463
Hazard label:	8, 3
Marine pollutant:	NO
Proper shipping name:	PROPIONIC ACID

Air transport
IATA/ICAO

Hazard class:	8
Packing group:	II

ID number:	UN 3463
Hazard label:	8, 3
Proper shipping name:	PROPIONIC ACID

15. Regulatory Information

Federal Regulations

Registration status:
Chemical DSL, CA released / listed

NFPA Hazard codes:
Health: 3 Fire: 2 Reactivity: 0 Special:

Assessment of the hazard classes according to UN GHS criteria (most recent version):

Skin Corr.	1B	Skin corrosion
Acute Tox.	5 (oral)	Acute toxicity
Flam. Liq.	3	Flammable liquids
Eye Dam.	1	Serious eye damage
Acute Tox.	5 (dermal)	Acute toxicity
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2025/09/30

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.

Date / Revised: 2025/09/30 Version: 10.0
Date / Previous version: 2024/12/04 Previous version: 9.0

END OF DATA SHEET