

Safety Data Sheet Basonat® LR 9056

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Version: 5.0 (30591253/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Basonat® LR 9056

Recommended use of the chemical and restriction on use

Recommended use*: Raw material, for industrial use only

Recommended use*: for industrial use only

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: polyfunctional polyisocyanate

2. Hazards Identification

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

Classification of the product

Acute Tox. 4 (Inhalation - mist) Acute toxicity Skin Sens. 1 Skin sensitization

STOT SE 3 (irritating to Specific target organ toxicity — single exposure

respiratory system)

Aquatic Acute 3 Hazardous to the aquatic environment - acute

^{*} 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.

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Aquatic Chronic 3

Hazardous to the aquatic environment - chronic

Label elements

Pictogram:



Signal Word: Warning

Hazard Statement:

H332 Harmful if inhaled.

H317 May cause an allergic skin reaction.
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.

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe mist or vapour.
P273 Avoid release to the environment.

P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P312 Call a POISON CENTER or physician if you feel unwell.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for

breathing.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water.

P333 + P311 If skin irritation or rash occurs: Call a POISON CENTER or 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 and 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 Hazardous Products Regulations (HPR) (SOR/2015-17)

(OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers

CAS Number: 28182-81-2 Content (W/W): >= 50.0 - < 75.0% Synonym: No data available.

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Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, polymer with 1,6-diisocyanatohexane,

block

CAS Number: 143472-08-6 Content (W/W): >= 25.0 - < 50.0% Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:

Immediately remove contaminated clothing.

If inhaled:

If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:

Wash affected areas thoroughly with soap and water. Seek medical attention.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open. 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: 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: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers Symptoms: Overexposure may cause:, Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

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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Unsuitable extinguishing media for safety reasons:

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:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of 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.

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

Avoid handling of the substance in case of known skin complaints, hypersensitivity reactions, chronic respiratory disease, asthmatic attacks or bronchial attacks. Avoid contact with the skin, eyes and clothing. Avoid inhalation of dusts/mists/vapours. Avoid frequent and direct contact with substance. Ensure good work practices are implemented. Regular inspection and maintenance of equipment and machines. Clean equipment and the work area every day. Engineering controls have to be used to reduce exposures. Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Workers should receive a pre-placement examination and subsequent periodic medical examinations, including a pulmonary function test. Wear suitable face shield Wear an impervious suit. Use suitable eye protection. Wear chemically resistant gloves in combination with 'basic' employee training. Change gloves, if duration of activity exceeds break through time Use a local exhaust ventilation with adequate effectiveness. In case of insufficient ventilation, wear suitable respiratory equipment.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

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

Storage stability:

If moisture enters isocyanate containers, CO2 forms and pressure builds up.

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Protect from temperatures above: 50 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

1,6-hexamethylene

diisocyanate **ACGIH TLV** TWA value 0.005 ppm;

Personal protective equipment

Respiratory protection:

For short-term or slight exposure, use a respiratory mask with filter, for intensive or long-term exposure wear full respiratory protection apparatus Combination filter for gases/vapours of organic compounds and solid and liquid particles (f.e. EN 14387 Type A-P2)

Hand protection:

Chemical resistant protective gloves

Eye protection:

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

Body protection:

Impermeable protective clothing

General safety and hygiene measures:

Handle in accordance with good industrial hygiene and safety practice. Clean equipment, work area and clothing regularly.

9. Physical and Chemical Properties

Form: liquid

Odour: almost odourless Odour threshold: not determined Colour: colourless to yellowish

pH value: not applicable approx. -46 °C

Melting point: No applicable information available.

Freezing point:

Boiling point: not determined

Sublimation point: No applicable information available.

168 °C Flash point: (DIN EN 2719; ISO

2719)

not flammable (derived from flash Flammability:

point)

(DIN 51583)

Lower explosion limit: As a result of our experience with this

product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

Upper explosion limit: As a result of our experience with this

product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with

the intended use.

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Autoignition: 414 °C (DIN EN 14522)

Study scientifically not justified.

Vapour pressure: < 0.0001 hPa

(20 °C)

Density: 1.16 g/cm3

(20 °C) 1.14 g/cm3 (50 °C)

Relative density: 1.16 (20 °C)

Vapour density: not determined

Partitioning coefficient n-

octanol/water (log Pow):

not self-igniting

Self-ignition temperature:

Thermal decomposition: No decomposition if used correctly. Viscosity, dynamic: 1,500 - 3,000 mPa.s

(23 °C)

Viscosity, kinematic: No applicable information available. Particle size: No applicable information available. The substance / product is marketed

or used in a non solid or granular

(DIN EN ISO 3219)

form.

Solubility in water: Reacts with water. Miscibility with water: Reacts with water.

Solubility (quantitative): No applicable information available.

Solubility (qualitative): soluble

solvent(s): polar solvents,

Molar mass: No applicable information available.

Evaporation rate: not determined

10. Stability and Reactivity

Reactivity

Oxidizing properties: not fire-propagating

Chemical stability

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

Possibility of hazardous reactions

Reacts with alcohols. Reacts with amines. Reacts with substances which contain active hydrogen. Reacts with water, with formation of carbon dioxide. The formation of gaseous decomposition products builds up pressure in tightly closed containers.

Conditions to avoid

Avoid moisture. Avoid humidity. Avoid direct contact with water.

Incompatible materials

water, alcohols, amines

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

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No decomposition if used correctly.

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: Virtually nontoxic after a single ingestion.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

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

individual components.

<u>Inhalation</u>

Type of value: LC50

Species: rat

Value: > 1 - 5 mg/l Exposure time: 4 h

The substance from the isocyanate substance class has been tested in a form (respirable aerosol) that is different from the forms in which the product is placed on the market and used. Therefore, the test result is not adequate for the purpose of classification and labelling of the product. Based on expert judgement and available data, a modified classification and labeling for acute inhalation toxicity is justified. The generation of a respirable aerosol must be prevented! The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers

Type of value: LC50 Species: rat (male/female)

Value: 0.467 mg/l (OECD Guideline 403)

Exposure time: 4 h
An aerosol was tested.

The test result applies only to the substance transferred into respirable aerosol (particles < 20 μm).

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Dermal

Type of value: LD50

Species: rat not determined

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin. The product has not been tested. The statement has been derived from the properties of the individual components.

Skin

Species: rabbit Result: non-irritant

Method: OECD Guideline 404

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The product has not been tested. The statement has been derived from the properties of the individual components.

Eye

Species: rabbit Result: non-irritant

Method: OECD Guideline 405

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

individual components.

Sensitization

Assessment of sensitization: May cause allergic skin reaction. The product has not been tested. The statement has been derived from the properties of the individual components.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers

Assessment of sensitization:

Caused skin sensitization in animal studies.

Guinea pig maximization test

Species: guinea pig Result: sensitizing

sensitizing effect in animal tests The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: No applicable information available.

Genetic toxicity

Assessment of mutagenicity: Based on the ingredients, there is no suspicion of a mutagenic effect.

Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

Medical conditions aggravated by overexposure

The isocyanate component is a respiratory sensitizer. It may cause allergic reaction leading to asthma-like spasms of the bronchial tubes and difficulty in breathing. Persons with asthmatic conditions, chronic bronchitis, other chronic respiratory diseases, recurrent eczema or pulmonary sensitization should be excluded from working with isocyanates. Once a person is diagnosed as having pulmonary sensitization (allergic asthma) to isocyanates, further exposure is not recommended.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

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), Fish not determined

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Aquatic invertebrates

EC50 (48 h) 10 - 100 mg/l, Daphnia magna

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), algae

not determined

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Assessment of terrestrial toxicity

Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

bacteria/EC50 (3 h): > 1,000 mg/l

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

Persistence and degradability

Assessment biodegradation and elimination (H2O)

The substance can be virtually eliminated from water in suitable effluent treatment plants by biodegradation, stripping and mechanical separation.

Elimination information

Not readily biodegradable (by OECD criteria).

Mobility in soil

Assessment transport between environmental compartments

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

No data available.

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 release untreated into natural waters. The local regulations on waste-water treatment must be followed.

13. Disposal considerations

Waste disposal of substance:

Dispose of in a licensed facility. Do not discharge into waterways or sewer systems without proper authorization.

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Container disposal:

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

14. Transport Information

Land transport

TDG

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 DSL, CA released; restriction on quantity / not listed

NFPA Hazard codes:

Health: 2 Fire: 1 Reactivity: 1 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2020/10/07

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.