

Safety Data Sheet

LOH40F LVOC Fast Hardener

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(30648636/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

LOH40F LVOC Fast Hardener

Recommended use of the chemical and restriction on use

Recommended use*: Paints, Coatings and Related Materials; for industrial use only

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.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Chemical family: Coating

2. Hazards Identification

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

Classification of the product

Skin Corr./Irrit.	2	Skin corrosion/irritation
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
Resp. Sens.	1	Respiratory sensitization
Skin Sens.	1	Skin sensitization
Repr.	2 (unborn child)	Reproductive toxicity
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
STOT RE	2	Specific target organ toxicity — repeated

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Aquatic Acute	3	exposure
Flam. Liq.	2	Hazardous to the aquatic environment - acute
		Flammable liquids

Label elements

Pictogram:



Signal Word:

Danger

Hazard Statement:

H225	Highly flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361	Suspected of damaging the unborn child.
H373	May cause damage to organs (Central nervous system) through prolonged or repeated exposure.
H402	Harmful to aquatic life.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P284	In case of inadequate ventilation wear respiratory protection.
P264	Wash contaminated body parts thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P242	Use only non-sparking tools.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P243	Take action to prevent static discharges.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dust or mist.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P201	Obtain special instructions before use.

Precautionary Statements (Response):

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P312	Call a POISON CENTER or 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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P370 + P378	In case of fire: Use water spray for extinction.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P303 + P361 + P353	IF ON SKIN (or hair): Remove or 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.
P337 + P313	If eye irritation persists: Get medical attention.
P308 + P313	IF exposed or concerned: Get medical attention.
P342 + P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P314	Get medical advice/attention if you feel unwell.

Precautionary Statements (Storage):

P403 + P233	Store in a well-ventilated place. 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 and container to hazardous or special waste collection point.
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Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

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

Toluene

CAS Number: 108-88-3
Content (W/W): ≥ 15.0 - $< 20.0\%$
Synonym: Benzene, methyl-

1,6-hexamethylene diisocyanate

CAS Number: 822-06-0
Content (W/W): ≥ 0.1 - $< 0.2\%$
Synonym: Hexamethylene diisocyanate

4-chloro- α,α,α -trifluorotoluene

CAS Number: 98-56-6
Content (W/W): ≥ 25.0 - $< 50.0\%$
Synonym: No data available.

HDI-oligomer (trimer)

CAS Number: 28182-81-2
Content (W/W): ≥ 25.0 - $< 50.0\%$
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. If breathing difficulties develop, aid in breathing and seek immediate medical attention.

If on skin:

Immediately wash thoroughly with soap and water, seek medical attention.

If in eyes:

Flush with copious amounts of water for at least 15 minutes. Hold eyelids open to facilitate rinsing. If irritation develops, seek medical attention. Seek medical attention.

If swallowed:

Immediate medical attention required. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Do not induce vomiting. Rinse mouth and then drink 200-300 ml of water.

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: Toluene

Symptoms: Overexposure may cause: , unconsciousness, death, dilation of pupils, coordination disorder, lethargy, confusion, headache, dizziness, lacrimation

Information on: 4-chloro- α,α,α -trifluorotoluene

Symptoms: Overexposure may cause: , lethargy, nausea, headache, dizziness

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:

carbon dioxide, foam, dry powder, water spray

Unsuitable extinguishing media for safety reasons:

water jet

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Special hazards arising from the substance or mixture

Hazards during fire-fighting:

Vapors and/or decomposition products are irritant and/or toxic. If product is heated above decomposition temperature acrid smoke and fumes will be released.

Advice for fire-fighters

Protective equipment for fire-fighting:

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

Further information:

Notify proper authorities. Do not flood burning material with water due to potential spreading of fire. Flash fire may occur. Run-off water from fire may cause pollution. Contain contaminated water/firefighting water. Remove product from areas of fire, or otherwise cool sealed containers with water in order to avoid pressure build up due to heat. Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Use antistatic tools. Extinguish sources of ignition nearby and downwind. Avoid prolonged inhalation. Wear suitable personal protective clothing and equipment. Ensure adequate ventilation.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

Dike spillage.

7. Handling and Storage

Precautions for safe handling

Handle and open container with care. WARNING: Empty containers may still contain hazardous residue. Use static lines when mixing and transferring material. Do not puncture, drop, or slide containers. Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing.

Protection against fire and explosion:

Risk of explosion if heated under confinement. Use antistatic tools. Exhaust fans should be explosion proof. Avoid all sources of ignition: heat, sparks, open flame. Provide adequate ventilation to remove solvent vapors from lower levels or work areas and to prevent solvent contact with ignition sources. Sealed containers should be protected against heat as this results in pressure build-up.

Conditions for safe storage, including any incompatibilities

Segregate from strong bases. Segregate from oxidizing agents. Segregate from incompatible substances. Segregate from strong acids.

Further information on storage conditions: Keep container tightly closed. Protect from direct sunlight.

Storage stability:

Consult local fire marshal for storage requirements.

Protect from temperatures above: 49 °C

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8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Toluene	OSHA PEL	TWA value 100 ppm 375 mg/m ³ ; STEL value 150 ppm 560 mg/m ³ ; max. conc. 500 ppm ; CLV 300 ppm ; TWA value 200 ppm ;
	ACGIH TLV	TWA value 20 ppm ;
1,6-hexamethylene diisocyanate	ACGIH TLV	TWA value 0.005 ppm ;

Personal protective equipment

Respiratory protection:

Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

Hand protection:

Use appropriate chemically impervious gloves as determined by an evaluation of glove performance characteristics and the hazards and potential hazards identified, including but not limited to butyl, natural and synthetic rubber, nitrile, or neoprene.

Eye protection:

Wear face shield if splashing hazard exists. Tightly fitting safety goggles (chemical goggles).

Body protection:

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

General safety and hygiene measures:

Work place should be equipped with a shower and an eye wash. Remove contaminated clothing. Remove contaminated clothing immediately and clean before re-use or dispose it if necessary. Contact lenses should not be worn. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	solvent-like	
Odour threshold:	No applicable information available.	
Colour:	water white	
pH value:	No applicable information available.	
Melting point:	No applicable information available.	
Freezing point:	No applicable information available.	
Boiling range:	110.00 - 139.00 °C	
Sublimation point:	No applicable information available.	
Flash point:	20.56 °C	(ASTM D3278)
Flammability:	No applicable information available.	
Lower explosion limit:	No applicable information available.	
Upper explosion limit:	No applicable information available.	
Autoignition:	No applicable information available.	
Vapour pressure:	22.00 mmHg (20 °C)	
Density:	1.1580 g/cm ³ (20 °C)	(calculated)
Relative density:	1.1580 (20 °C)	
Vapour density:	No applicable information available.	

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Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.
Thermal decomposition:	No applicable information available.
Viscosity, dynamic:	No applicable information available.
Viscosity, kinematic:	No applicable information available.
Solubility in water:	No applicable information available.
Solubility (quantitative):	No applicable information available.
Solubility (qualitative):	No applicable information available.
Molar mass:	No applicable information available.
Evaporation rate:	No applicable information available.

10. Stability and Reactivity

Reactivity

No applicable information available.

Chemical stability

The product is chemically stable.

Possibility of hazardous reactions

No applicable information available.

Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid electro-static discharge.

Incompatible materials

strong oxidizing agents, strong bases, strong acids, thiols, transition metal salts, amines, alcohols

Hazardous decomposition products

Decomposition products:

carbon dioxide, carbon monoxide

Thermal decomposition:

No applicable information available.

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. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact.

Information on: 1,6-hexamethylene diisocyanate

Assessment of acute toxicity: Of high toxicity after short-term inhalation. In animal studies the substance is virtually nontoxic after a single skin contact. Of moderate toxicity after single ingestion.

Information on: HDI-oligomer (trimer)

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Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Of moderate toxicity after short-term inhalation.

Oral

Type of value: LD50

Species: rat

Value: > 5,000.000000 mg/kg

Inhalation

Type of value: LC50

Species: rat

Value: 28.100000 mg/l

Dermal

Type of value: LD50

Species: rat

Value: > 5,000.000000 mg/kg

Assessment other acute effects

Assessment of STOT single:

Causes temporary irritation of the respiratory tract.

Irritation / corrosion

Assessment of irritating effects: Skin contact causes irritation.

Information on: Toluene

Assessment of irritating effects: Skin contact causes irritation. May cause slight irritation to the eyes.

Information on: 1,6-hexamethylene diisocyanate

Assessment of irritating effects: Irritating to eyes and skin.

Information on: 4-chloro- α,α,α -trifluorotoluene

Assessment of irritating effects: May cause slight irritation to the skin. Not irritating to the eyes.

Information on: HDI-oligomer (trimer)

Assessment of irritating effects: May cause slight irritation to the skin. May cause slight irritation to the eyes.

Sensitization

Information on: 1,6-hexamethylene diisocyanate

Assessment of sensitization:

The substance may cause sensitization of the respiratory tract. Sensitization after skin contact possible.

Information on: HDI-oligomer (trimer)

Assessment of sensitization:

Caused skin sensitization in animal studies.

Aspiration Hazard

No applicable information available.

Chronic Toxicity/Effects

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Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Information on: Toluene

Assessment of repeated dose toxicity: Repeated exposure to large quantities may affect certain organs. Damages the central nerve system. The substance may cause deafness after repeated inhalation.

Information on: 1,6-hexamethylene diisocyanate

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation. Based on the chemical structure a neurotoxic effect by repeated administration cannot be excluded.

Information on: 4-chloro- α,α,α -trifluorotoluene

Assessment of repeated dose toxicity: Repeated exposure to the substance by oral administration leads to effects similar to those found after single exposure. Repeated exposure to the substance by inhalative administration leads to effects similar to those found after single exposure. May affect the liver and kidneys as indicated in animal studies. Overexposure may cause blood abnormalities.

Information on: HDI-oligomer (trimer)

Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

Carcinogenicity

Assessment of carcinogenicity: No data available concerning carcinogenic effects.

Teratogenicity

Information on: Toluene

Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

Information on: Toluene

Assessment of teratogenicity: Indications of possible developmental toxicity/teratogenicity were seen in animal studies.

12. Ecological Information

No applicable information available.

13. Disposal considerations

Waste disposal of substance:

Do not incinerate closed containers. The use and processing of this product, or addition of other constituents, may cause it to be considered a hazardous waste. Do not discharge into drains/surface waters/groundwater.

Must be disposed of or incinerated in accordance with local regulations.

Container disposal:

WARNING: Empty containers may still contain hazardous residue.

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14. Transport Information

Land transport

TDG

Hazard class: 3
Packing group: II
ID number: UN 1263
Hazard label: 3
Proper shipping name: PAINT RELATED MATERIAL

Sea transport

IMDG

Hazard class: 3
Packing group: II
ID number: UN 1263
Hazard label: 3
Marine pollutant: NO
Proper shipping name: PAINT RELATED MATERIAL

Air transport

IATA/ICAO

Hazard class: 3
Packing group: II
ID number: UN 1263
Hazard label: 3
Proper shipping name: PAINT RELATED MATERIAL

15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

NFPA Hazard codes:

Health: 2 Fire: 3 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2020/07/24

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

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operations on society and the environment during production, storage, transport, use and disposal of our products.

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