1. Identification

Product identifier used on the label

LH810 NORMAL PRMR HRDR

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 CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Synonyms: Paint Related Material

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
Skin Sens.	1	Skin sensitization
Repr.	2 (unborn child)	Reproductive toxicity
STOT SE	3 (Vapours may cause drowsiness and dizziness.)	Specific target organ toxicity — single exposure

STOT RE	2	Specific target organ toxicity — repeated exposure
Aquatic Acute	3	Hazardous to the aquatic environment - acute
Flam. Liq.	2	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.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging the unborn child.
H402	Harmful to aquatic life.
H373	May cause damage to organs (Central nervous system) through prolonged or repeated exposure.

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.
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):

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.
P333 + P313	If skin irritation or rash occurs: Get medical attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
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.
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.

Hazards not otherwise classified

No applicable information available.

3. Composition / Information on Ingredients

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

1-methoxy-2-propylacetate
CAS Number: 108-65-6
Content (W/W): >= 3.0 - < 5.0%
Synonym: 2-Methoxy-1-methylethyl acetate; 1-Methoxy-2-propyl acetate

Toluene
CAS Number: 108-88-3
Content (W/W): >= 15.0 - < 20.0%
Synonym: Benzene, methyl-

2-heptanone
CAS Number: 110-43-0
Content (W/W): >= 1.0 - < 3.0%
Synonym: 2-Heptanone; Methyl n-amyl ketone

n-Butyl acetate
CAS Number: 123-86-4
Content (W/W): >= 15.0 - < 20.0%
Synonym: n-Butyl acetate

ethyl acetate
CAS Number: 141-78-6
Content (W/W): >= 20.0 - < 25.0%
Synonym: Acetic acid, ethyl ester

Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer
CAS Number: 53880-05-0
Content (W/W): >= 3.0 - < 5.0%
Synonym: 5-Isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane homopolymer

(OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers
CAS Number: 28182-81-2
Content (W/W): >= 25.0 - < 50.0%
Synonym: No data available.

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). 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: 2-heptanone
Symptoms: Overexposure may cause:, headache, dizziness, nausea, unconsciousness

Information on: ethyl acetate
Symptoms: Overexposure may cause:, Eye irritation, skin irritation, erythema, nausea, headache, vomiting, dizziness, diarrhea, abdominal cramps

Information on: Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer
Symptoms: No data 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

Extinguishing media

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

Unsuitable extinguishing media for safety reasons:
water jet

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:
Avoid water contamination in closed containers of confined areas, because carbon dioxide gas is generated. 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.

A spill of or in excess of the reportable quantity requires notification to state, local and national emergency authorities.

Methods and material for containment and cleaning up
Dike spillage. Wash down spill area with decontamination solution. Spill area can be decontaminated with the following recommended decontamination solution: Allow solution to stand for at least 10 minutes. Remove containers to a safe place, cover loosely, and allow to stand for 24 to 48 hours

before sealing and disposing. Shovel into open container. Add additional decontamination solution to waste container. Mixture of 80 % water and 20 % non-ionic surfactant, or 90 - 95 % water, 3 - 8 % concentrated ammonia and 2 % detergent.

7. Handling and Storage

Precautions for safe handling

Handle and open container with care. Avoid water contamination in closed containers of confined areas, because carbon dioxide gas is generated. WARNING: Empty containers may still contain hazardous residue. If bulging of drum occurs, transfer to well ventilated area, puncture to relieve pressure, open vent and let stand for 48 hours before resealing. Do not reseal container if contamination of the product is suspected. 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.

Proper ventilation and respiratory protection is required when sanding, flame cutting, welding or brazing coated surfaces. Do not apply to hot surfaces.

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 metals. Segregate from strong acids. Keep away from water.

Suitable materials for containers: tinned carbon steel (Tinplate), Carbon steel (Iron), Stove-lacquer Valspar HXR008F red, Stove-lacquer KNS L-5X

Further information on storage conditions: Keep container tightly closed. Protect against moisture. Carbon dioxide gas can cause containers to expand and possibly rupture explosively. Store protected against freezing. Protect from direct sunlight. If moisture enters isocyanate containers, CO2 forms and pressure builds up.

Storage stability:
Storage temperature: 25 - 35 °C
Consult local fire marshal for storage requirements.
Slow non-hazardous polymerization possible when at or exceeding maximum temperatures.
Protect from temperatures above: 49 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Toluene	ACGIH, US:	TWA value 20 ppm ;
	OSHA Z2:	max. conc. 500 ppm ;
	OSHA Z2:	CLV 300 ppm ;
	OSHA Z2:	TWA value 200 ppm ;

2-heptanone	ACGIH, US:	TWA value 50 ppm ;
	OSHA Z1:	PEL 100 ppm 465 mg/m3 ;
n-Butyl acetate	ACGIH, US:	STEL value 150 ppm ;
	ACGIH, US:	TWA value 50 ppm ;
	OSHA Z1:	PEL 150 ppm 710 mg/m3 ;
ethyl acetate	ACGIH, US:	TWA value 400 ppm ;
	OSHA Z1:	PEL 400 ppm 1,400 mg/m3 ;

Advice on system design:
Provide local exhaust ventilation to maintain recommended P.E.L.
General mechanical ventilation should comply with OSHA 1910.94.

Personal protective equipment

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

Observe OSHA regulations for respirator use (29 CFR 1910.134).

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. Consider the type of application and environmental concentrations to maintain the actual exposures below the established exposure limits. Employee education and training in the safe use and handling of isocyanates is required under the OSHA Communication Standard. 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:	No data available.
Odour threshold:	No applicable information available.
Colour:	clear
pH value:	No applicable information available.
Melting point:	No applicable information available.
Freezing point:	No applicable information available.
Boiling range:	77.00 - 355.00 °C 170.60 - 671.00 °F
Sublimation point:	No applicable information available.
Flash point:	-4.00 °C 24.80 °F
Flammability:	No applicable information available.

Lower explosion limit:	1.00 %(V)	
Upper explosion limit:	12.80 %(V)	
Autoignition:	No applicable information available.	
Vapour pressure:	22.00 mmHg (20 °C)	
Density:	0.9773 g/cm3 (20 °C)	(calculated)
	8.1561 lb/USg	(calculated)
Relative density:	0.9773 (20 °C)	
Vapour density:	No applicable information available.	
Partitioning coefficient n-octanol/water (log Pow):	No applicable information available.	
Thermal decomposition:	Risk of polymerization above the indicated temperature in the presence of moisture and isocyanate reactive substances. No applicable information available.	
Viscosity, dynamic:	No applicable information available.	
Viscosity, kinematic:	> 20.500 mm2/s	
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
On contact with water, gaseous decomposition products are formed, which cause build-up of pressure in tightly closed containers. Reacts with water.

Conditions to avoid
Avoid all sources of ignition: heat, sparks, open flame. Avoid direct contact with water. Avoid electrostatic discharge.

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

Hazardous decomposition products

Decomposition products:
nitrogen oxides, carbon dioxide, carbon monoxide, hydrogen cyanide

Thermal decomposition:
Risk of polymerization above the indicated temperature in the presence of moisture and isocyanate reactive substances. 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: Based on available data, the classification criteria are not met.

Information on: 2-heptanone
Assessment of acute toxicity:Of moderate toxicity after short-term inhalation. Of moderate toxicity after single ingestion. Virtually nontoxic after a single skin contact.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers
Assessment of acute toxicity:Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Of moderate toxicity after short-term inhalation.

Assessment other acute effects
Assessment of STOT single:
Possible narcotic effects (drowsiness or dizziness).

Irritation / corrosion
Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation.

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

Information on: 2-heptanone
Assessment of irritating effects: Not irritating to the eyes. May cause slight irritation to the skin.

Information on: n-Butyl acetate
Assessment of irritating effects: Not irritating to the skin. Not irritating to the eyes.
Not irritating to the skin. May cause slight irritation to the eyes.

Information on: ethyl acetate
Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation. EU-classification Repeated or prolonged skin contact can cause drying and cracking of the skin.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers
Assessment of irritating effects: May cause slight irritation to the skin. May cause slight irritation to the eyes.

Sensitization
Assessment of sensitization: Sensitization after skin contact possible.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers
Assessment of sensitization:
Caused skin sensitization in animal studies.

Aspiration Hazard
No aspiration hazard expected.

Chronic Toxicity/Effects

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

Information on: 1-methoxy-2-propylacetate
Assessment of repeated dose toxicity: Repeated dermal uptake of the substance did not cause substance-related effects. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. The substance may cause damage to the olfactory epithelium after repeated inhalation. Repeated oral uptake of the substance did not cause substance-related effects.

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: n-Butyl acetate
Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

Information on: ethyl acetate
Assessment of repeated dose toxicity: The substance may cause damage to the olfactory epithelium after repeated inhalation. Based on available data, the classification criteria are not met.

Information on: (OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers
Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.

Genetic toxicity
Assessment of mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity
Assessment of carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity
Assessment of reproduction toxicity: Based on available data, the classification criteria are not met.

Information on: ethyl acetate
Assessment of reproduction toxicity: Repeated inhalative uptake of the substance did not cause damage to the reproductive organs. In high doses a potential to impair fertility cannot be fully excluded. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

Teratogenicity
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.

Information on: ethyl acetate
Assessment of teratogenicity: The substance did not cause malformations in animal studies; however, toxicity to development was observed at high doses that were toxic to the parental animals. 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
Medical supervision of all employees who handle or come into contact with isocyanates is recommended. 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. 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.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
Harmful to aquatic life. There are no test results available for this product. Do not allow to enter drains or waterways.

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.
Incinerate or dispose of in a RCRA-licensed facility. 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:
WARNING: Empty containers may still contain hazardous residue.
Dispose of in accordance with national, state and local regulations.

14. Transport Information

Land transport
USDOT

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 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
108-88-3	Toluene

State regulations

State RTK	CAS Number	Chemical name
NJ	108-88-3	Toluene
	110-43-0	2-heptanone
	123-86-4	n-Butyl acetate
	141-78-6	ethyl acetate
PA	108-88-3	Toluene
	110-43-0	2-heptanone
	123-86-4	n-Butyl acetate
	141-78-6	ethyl acetate

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

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

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

HMIS III rating
Health: 2¤ Flammability: 3 Physical hazard: 0

16. Other Information

SDS Prepared by:
BASF NA Product Regulations
SDS Prepared on: 2022/03/18

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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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