

Safety Data Sheet

929-385 Normal Hardener

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1. Identification

Product identifier used on the label

929-385 Normal 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 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

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
STOT SE	3 (irritating to respiratory system)	Specific target organ toxicity — single exposure
Flam. Liq.	3	Flammable liquids

Label elements

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Pictogram:



Signal Word:
Warning

Hazard Statement:

H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
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.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P240	Ground and bond container and receiving equipment.
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.
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.

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.

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3. Composition / Information on Ingredients

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

Propanoic acid, 3-ethoxy-, ethyl ester

CAS Number: 763-69-9

Content (W/W): $\geq 7.0 - < 10.0\%$

Synonym: 3-Ethoxypropanoic acid ethyl ester; Ethyl 3-ethoxypropionate

Hexane, 1,6-diisocyanato-, homopolymer

CAS Number: 28182-81-2

Content (W/W): $\geq 20.0 - < 25.0\%$

Synonym: 1,6-Diisocyanatohexane homopolymer

(OLIGOMER) Hexamethylene diisocyanate isocyanurate-type oligomers

CAS Number: 28182-81-2

Content (W/W): $\geq 20.0 - < 25.0\%$

Synonym: No data available.

4-chloro- α,α,α -trifluorotoluene

CAS Number: 98-56-6

Content (W/W): $\geq 25.0 - < 50.0\%$

Synonym: No data available.

(3-glycidoxypropyl) trimethoxysilane

CAS Number: 2530-83-8

Content (W/W): $\geq 1.0 - < 3.0\%$

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.

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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: Propanoic acid, 3-ethoxy-, ethyl ester

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

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

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

Information on: (3-glycidoxypropyl) trimethoxysilane

Symptoms: Overexposure may cause: , corneal injury, skin corrosion, severe pain, coughing, respiratory disorders, dyspnea, 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:
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.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. 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. Store in a well-ventilated place. Keep cool. 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.

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.

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Protect from temperatures above: 49 °C

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:

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. For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. Respiratory protection equipment must be approved for use with isocyanates.

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 on inert carrier material
Odour:	No data available.
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:	138.60 - 355.00 °C 281.48 - 671.00 °F
Sublimation point:	No applicable information available.
Flash point:	42.77 °C 108.99 °F
Flammability:	No applicable information available.

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Lower explosion limit:	0.90 %(V)	
Upper explosion limit:	10.50 %(V)	
Autoignition:	No applicable information available.	
Vapour pressure:	No applicable information available.	
Density:	1.2124 g/cm ³	(calculated)
	(20 °C)	
	10.1176 lb/USg	(calculated)
Relative density:	1.2124	
	(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 mm ² /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

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

Information on: Propanoic acid, 3-ethoxy-, ethyl ester

Assessment of acute toxicity: Of low toxicity after single ingestion. The inhalation of a highly enriched/saturated vapor-air-mixture represents an unlikely acute hazard. Of low toxicity after short-term 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.

Information on: (3-glycidoxypropyl) trimethoxysilane

Assessment of acute toxicity: Of low toxicity after single ingestion. Of low toxicity after short-term skin contact. Of low toxicity after short-term inhalation.

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.

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.

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: (3-glycidoxypropyl) trimethoxysilane

Assessment of irritating effects: May cause severe damage to the eyes. Not irritating to the skin.

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 applicable information available.

Chronic Toxicity/Effects

Repeated dose toxicity

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

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.

Genetic toxicity

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

Information on: (3-glycidoxypropyl) trimethoxysilane
Assessment of mutagenicity: The substance was mutagenic in various test systems with microorganisms, mammalian cell culture and mammals.

Carcinogenicity

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

Information on: (3-glycidoxypropyl) trimethoxysilane
Assessment of carcinogenicity: The substance showed no carcinogenic activity in animals after chronic administration to the skin.

Reproductive toxicity

Assessment of reproduction toxicity: No applicable information available.

Teratogenicity

Assessment of teratogenicity: No applicable information available.

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

No applicable information available.

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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:	III
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION

Sea transport

IMDG

Hazard class:	3
Packing group:	III
ID number:	UN 1866
Hazard label:	3
Marine pollutant:	NO
Proper shipping name:	RESIN SOLUTION

Air transport

IATA/ICAO

Hazard class:	3
Packing group:	III
ID number:	UN 1866
Hazard label:	3
Proper shipping name:	RESIN SOLUTION

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.

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State regulations

State RTK

NJ

CAS Number

98-56-6

Chemical name

4-chloro- α,α,α -trifluorotoluene

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

WARNING: This product can expose you to chemicals including P-CHLORO-#,#,#-TRIFLUOROTOLUENE (PARA-CHLOROBENZOTRIFLUORIDE, PCBTF), which is known to the State of California to cause cancer, and METHANOL, 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: 2 Reactivity: 0 Special:

HMIS III rating

Health: 2 α Flammability: 2 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2021/02/26

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.

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