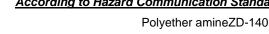
Safety Data Sheet

According to Hazard Communication Standard (29 CFR 1910.1200)





SDS record number: CSSS-TCO-010-151109

Version 1.0

Issue date: 04/27/2022 Revision date: 04/27/2022

1. Identification

Product name Polyether amineZD-140

Synonyms -

CAS # 9046-10-0

Product code

Product use Epoxy curing agent that provides increased flexibility and toughness; Used in

polyurethanes, polyureas, and thermoplastic polyamide adhesives; Salts may

be formed for use in cutting fluids

Manufacturer/Supplier

Supplier(Manufacturer): Zibo Zhengda Polyurethane Co.,Ltd.

Address: RM1904, BUILDING E, CHUANGYE HUOJU SQUARE, NO.111 LIUQUAN

ROAD, ZHANGDIAN, ZIBO SHANDONG PROVINCE, P.R. CHINA

Contact person(E-mail):arnie@dexin-chem.comTelephone:0086-533-3146343

Fax: 0086-533-3142021

Emergency telephone Number: 0086-533-3146343

2. Hazard(s) identification

GHS classification

Physical hazards Not classified

Health hazards Skin corrosion/irritation Category 1C

Eye damage/irritation Category 1

Environmental hazards Not classified

GHS label elements

Hazard Pictograms



Signal word Danger

Hazard statement Causes severe skin burns and eye damage

Precautionary statement

Prevention Do not breathe dusts or mists.

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

Response If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin

with water/shower.

Wash contaminated clothing before reuse.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Immediately call a poison center/doctor/...

If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local regulation.

Other hazards Not available.

3. Composition / information on ingredients

Components	CAS#	Percent	
Polyether amineZD-140	9046-10-0	100%	

4. First-aid Measures

First aid procedures

Eve contact

Skin contact

Inhalation

Ingestion

Notes to physician

5. Fire-fighting measures

Flammable properties

Not available.

Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Treat symptoms.

Issue date: 04-27-2022.

Material name: Polyether amineZD-140 Version #:1.0 Revision date: 04-27-2022. SDS US

Extinguishing media

Suitable extinguishing media
Unsuitable extinguishing media

Firefighting equipment/instructions

Hazardous combustion products

6. Accidental release measures

Personal precautions

Environmental precautions

Methods for cleaning up

7. Handling and storage

Storage

Use an extinguishing agent suitable for the surrounding fire.

Not available.

In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. According to size of fire Full protection, if necessary. Dispose of contaminated extinction water according to official regulations.

In case of fire, the following can be released: carbon dioxide, carbon monoxide, nitrogen oxides.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

Put on appropriate personal protective equipment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

8. Exposure controls / personal protection

Control parameters:

Occupational exposure limits

This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Appropriate engineering controls: Use in a well-ventilated area.

Individual protection measures, such as personal protective equipment:

Eye / face protection Safety eyewear complying with an approved standard should be used when a

risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards

exist, a full-face respirator may be required instead.

Skin protection Chemical-resistant, impervious gloves complying with an approved standard

should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified

by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for

any glove material may be different for different glove manufacturers. In the

case of mixtures, consisting of several substances, the protection time of the

gloves cannot be accurately estimated. > 8 hours (breakthrough time): butyl rubber, Ethyl Vinyl Alcohol Laminate (EVAL), nitrile rubber. Personal

protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist

before handling this product.

Respiratory protection In case of inadequate ventilation wear respiratory protection.

General hygiene Wash hands, forearms and face thoroughly after handling chemical products,

before eating, smoking and using the lavatory and at the end of the working

period. Keep away from foodstuffs, beverages and feed. Immediately remove

all soiled and contaminated clothing.

9. Physical and chemical properties

Appearance

considerations

Physical stateLiquidFormLiquid

Color Colorless,Transparent

Odor Amine-like
Odor threshold Not available

pH 5% aqueous solution 11.6

Vapor pressure 1 mm Hg 165°C, 10 mm Hg 193°C

Melting point/Freezing point Not available

initial boiling point and boiling range 232 °C

Material name: Polyether amineZD-140

Version #:1.0 Revision date: 04-27-2022. Issue date: 04-27-2022. 4 /

Flash point 163°C (Pensky-Martin closed cup)

Evaporation rate Not available Flammability (solid, gas) Not available **Explosion limits** Not available Vapor density Not available Not available Relative density Miscible Solubility (water) Partition coefficient Not available **Auto-ignition temperature** Not available **Decomposition temperature** Not available

0.9720(25 °C) 8.1 lb/gal (25 °C) Density

Flammability limits in air, upper, %by volume Not available Flammability limits in air, lower, % by volume Not available VOC Not available Percent volatile Not available

Other data

Specific gravity

Viscosity 22 (25 °C) Color (Apha) ≤50 ≤0.25 Water Content (%) Total amine(meq/g) 4.1-4.7 Primary amine(%) ≥97

10. Stability and reactivity

Chemical stability Material is stable under normal conditions.

Conditions to avoid Incompatible materials.

Incompatible materials

Hazardous decomposition products Ammonia, carbon monoxide, carbon dioxide, aldehydes, ketones.

Not available

Possibility of hazardous reactions No dangerous reactions known.

11. Toxicological information

Toxicokinetics, metabolism and distribution:

Not available Non-human toxicological data:

Information on toxicological effects:

Acute toxicity:

LD50(Oral, Rat): 1100 mg/kg bw LD50(Dermal, Rabbit): 1555 mg/kg bw LC50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Causes severe skin burns and eye damage.

Serious eye damage/irritation: Causes serious eye damage.

Respiratory or skin sensitization: Not classified. Germ cell mutagenicity: Not classified Not classified Carcinogenicity: Not classified Reproductive toxicity: STOT- single exposure: Not classified Not classified STOT-repeated exposure: Aspiration hazard: Not classified

Material name: Polyether amineZD-140

SDS US

12. Ecological information

Toxicity:

Acute to	xicity	Time	Species	Method	Evaluation	Remarks
LC50	>100 mg/L	96h	Fish	OECD 203	N/A	N/A
EC50	15 mg/L	48h	Daphnia	OECD 202	N/A	N/A
EC50	135 mg/L	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Under test conditions no biodegradation observed.

Bioaccumulative potential:

Mobility in soil:

Not available.

Not available.

Not available.

Other adverse effects: No known significant effects or critical hazards.

13. Disposal considerations

Disposal instructions Dispose of contents/container in accordance with local/regional/national/

international regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings

even after container is emptied.

14. Transport information

DOT

Basic shipping requirements:

UN number UN2735

Proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyether amineZD-140)

Hazard class 8
Packing group III
Environmental hazards No

IATA

UN number UN2735

UN proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyether amineZD-140)

Transport hazard class(es) 8
Packing group III
Environmental hazards No

IMDG

UN number UN2735

UN proper shipping name POLYAMINES, LIQUID, CORROSIVE, N.O.S. (Polyether amineZD-140)

Transport hazard class(es) 8

Packing group III

Environmental hazards No

15. Regulatory information

US federal regulations

Toxic Substances Control Act (TSCA)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Material name: Polyether amineZD-140
Version #:1.0 Revision date: 04-27-2022. Issue date: 04-27-2022.

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

Classified hazard categories Skin corrosion or irritation

Yes

Serious eye damage or eye irritation

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

International Inventories

Country(s) or region	Inventory name	On inventory
		(yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China	Yes
	(IECSC)	
Japan	Inventory of Existing and New Chemical Substances	No
	(ENCS)	
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical	Yes
	Substances (PICCS)	
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other information, including date of preparation or last revision

Material name: Polyether amineZD-140 Version #:1.0 Revision date: 04-27-2022.

SDS US 7 / 8

Issue date: 04-27-2022.

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

HMIS®ratings

HEALTH	3
FLAMMABILITY	1
PHYSICAL HAZARD	0
PERSONAL PROTECTION	Н

NFPA ratings



Disclaimer

Issue date

The information in the sheet was written based on the best knowledge and experience currently available.

04-27-2022