

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : SU 315-14T

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Thermal barrier polymer (Part B)

1.3. Supplier

Azon USA Inc.
2204 Ravine Rd
Kalamazo, Michigan 49004
USA
T 269-385-5942

1.4. Emergency telephone number

Emergency number : For Hazardous Materials or Dangerous Goods Incident Spill, Leak, Fire, Exposure, or Accident
Call CHEMTREC Day or Night: 1-800-424-9300 (Toll Free, USA) / 703-527-3887 (Virginia, USA)
CCN 2189

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2 Causes serious eye irritation
Specific target organ toxicity (repeated exposure) Category 2 May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation)

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) : Warning
Hazard statements (GHS US) : Causes serious eye irritation
May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation)
Precautionary statements (GHS US) : Do not breathe mist, spray, vapors.
Wash hands, forearms and face thoroughly after handling.
Wear protective clothing, eye protection, face protection.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Get medical advice/attention if you feel unwell.
If eye irritation persists: Get medical advice/attention.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

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2.3. Other hazards which do not result in classification

No additional information available.

2.4. Unknown acute toxicity (GHS US)

No additional information available.

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS US classification
Polyether Polyol	CAS-No.: 9082-00-2	30 – 50	Not classified
Diethylene Glycol-phthalic Anhydride Polymer	CAS-No.: 32472-85-8	8 – 18	Aquatic Chronic 3, H412
Diethylene glycol	CAS-No.: 111-46-6	8.1 – 18	Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320
Ethylene Glycol	CAS-No.: 107-21-1	1.1 – 6	Acute Tox. 4 (Oral), H302 Eye Irrit. 2B, H320 STOT RE 2, H373
Bis-(dimethylaminopropyl)methylamine	CAS-No.: 3855-32-1	1 – 5	Flam. Liq. 4, H227 Aquatic Chronic 3, H412
Bis(2-hydroxyethyl) (methylenedi-1,4-phenylene)biscarbamate	CAS-No.: No Data	0.1 – 0.5	Not classified
Bis[2-(2-hydroxyethoxy)ethyl] (methylenedi-1,4-phenylene)biscarbamate	CAS-No.: No Data	0.1 – 0.5	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. First aider: Pay attention to self-protection. Never give anything by mouth to an unconscious person. Give artificial respiration if necessary. Induce artificial respiration with mask fitted with one-way valve or other suitable device but not mouth-to-mouth.
First-aid measures after inhalation	: Call a physician immediately. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If the victim is unconscious : Lay in a stable manner on victim's side.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Call a poison center/doctor/physician if you feel unwell. Do NOT induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Possible respiratory damage following repeated or prolonged inhalation.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: May cause severe irritation.

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Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Most Important Symptoms/Effects	: Eye irritation.
Chronic symptoms	: Prolonged and frequent exposure through inhalation may cause cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Carbon dioxide (CO ₂), dry chemical powder, foam.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: No fire hazard.
Reactivity in case of fire	: The product is non-reactive under normal conditions of use, storage and transport.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide. Nitrogen oxides.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. Move containers from fire area if it can be done without personal risk. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Evacuate area. Do not take actions involving personal risks. Avoid all personal contact including breathing in the mist, spray, vapors. Stop leak if safe to do so. Absorb spillage to prevent material-damage. Notify authorities if product enters sewers or public waters.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate the danger area. If possible without taking personal risks, remove ignition sources. If outdoors, move to an area upwind of the danger area. Prevent other non-emergency personnel from entering the danger area. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Stop leak if safe to do so. Prevent runoff from entering drains, sewers or waterways.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment	: Stop leak, if possible without risk. Contain with non-combustible inert absorbent. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
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Methods for cleaning up : Take up in non-combustible inert absorbent and place into container for disposal. Contaminated absorbent material may pose the same hazard as the spilt product. Decontaminate surfaces and equipment with water and detergent. Until a sufficient level of dilution is achieved, the decontamination water may pose the same hazards as the product. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations. Notify authorities if product enters sewers or public waters.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not breathe mist, spray, vapors. Avoid contact with skin, eyes and clothing.

Hygiene measures : Always wash hands after handling the product. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a cool, dry and well-ventilated area away from incompatible substances. Keep container tightly closed.

Incompatible materials : Alkalis. Oxidizing agents.

Packaging materials : Store always product in container of same material as original container.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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No additional information available.

Polyether Polyol (9082-00-2)

No additional information available.

Diethylene Glycol-phthalic Anhydride Polymer (32472-85-8)

No additional information available.

Diethylene glycol (111-46-6)

No additional information available.

Ethylene Glycol (107-21-1)

USA - ACGIH - Occupational Exposure Limits

Local name	Ethylene glycol
ACGIH OEL TWA	25 ppm (V - Vapor fraction)
ACGIH OEL STEL	10 mg/m ³ (I - Inhalable particulate matter, H - Aerosol only) 50 ppm (V - Vapor fraction)
Remark (ACGIH)	TLV® Basis: URT irr. Notations: A4 (Not classifiable as a Human Carcinogen)
Regulatory reference	ACGIH 2024

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N'-[3-(dimethylamino)propyl]-N,N,N'-trimethyl-propane-1,3-diamine (3855-32-1)

No additional information available.

Bis(2-hydroxyethyl) (methylenedi-1,4-phenylene)biscarbamate (No Data)

No additional information available.

Bis[2-(2-hydroxyethoxy)ethyl] (methylenedi-1,4-phenylene)biscarbamate (No Data)

No additional information available.

8.2. Appropriate engineering controls

Appropriate engineering controls	: Ensure good ventilation of the work station. Use general ventilation, local exhaust ventilation, or process enclosure to keep the airborne concentrations below the permissible exposure limits. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
Environmental exposure controls	: Avoid release to the environment. Take measures to reduce or limit air emissions and releases to soil and the aquatic environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Personal protective equipment should be chosen according to national standards and in discussion with the supplier of the protective equipment. Wear recommended personal protective equipment.

Hand protection:

Wear protective gloves. Protective gloves made of : Neoprene or nitrile rubber gloves, PVC or other plastic material or natural rubber gloves

Eye protection:

Chemical goggles or face shield

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

In case of inadequate ventilation wear respiratory protection. Self-contained breathing apparatus

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid.
Color	: Clear purple to black.
Odor	: No data available
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available

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Flash point	: > 200 °F / > 93 °C
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: No data available
Relative density	: No data available
Solubility	: No data available
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: 600 cP @ 25° C/77° F
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

No additional information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

No additional information available.

10.3. Possibility of hazardous reactions

No additional information available.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Incompatible materials.

10.5. Incompatible materials

Alkalis. Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Carbon dioxide. Carbon monoxide. Nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Diethylene Glycol-phthalic Anhydride Polymer

LD50 dermal rat	> 2000 mg/kg
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Diethylene glycol	
LD50 oral rat	12000 mg/kg
LD50 dermal rabbit	11890 mg/kg
Ethylene Glycol	
LD50 oral rat	4700 mg/kg body weight
LD50 dermal rat	9530 mg/kg body weight
Skin corrosion/irritation	: Not classified
Ethylene Glycol	
Skin corrosion/irritation, rabbit	Not irritating to skin
Serious eye damage/irritation	: Causes serious eye irritation.
Diethylene glycol	
Serious eye damage/irritation, rabbit	Slightly irritating
Ethylene Glycol	
Serious eye damage/irritation, rabbit	<40% Irritating to eyes (Fully reversible effects within 7 days of observation)
Respiratory or skin sensitization	: Not classified
Ethylene Glycol	
Guinea pig maximization test	Not sensitive
Skin sensitization, human	Not sensitive
Germ cell mutagenicity	: Not classified
Ethylene Glycol	
Additional information	Dominant lethal test, Rat- Negative
Carcinogenicity	: Not classified
Diethylene glycol	
NOAEL (chronic,oral,animal/male,2 years)	1210 mg/kg body weight
NOAEL (chronic,oral,animal/female,2 years)	1160 mg/kg body weight
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).
Diethylene glycol	
LOAEL (oral,rat,90 days)	40000 mg/kg body weight
Ethylene Glycol	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: Possible respiratory damage following repeated or prolonged inhalation.
Symptoms/effects after skin contact	: Not expected to present a significant skin hazard under anticipated conditions of normal use.
Symptoms/effects after eye contact	: May cause severe irritation.
Symptoms/effects after ingestion	: Not expected to present a significant ingestion hazard under anticipated conditions of normal use.
Most Important Symptoms/Effects	: Eye irritation.

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Chronic symptoms : Prolonged and frequent exposure through inhalation may cause cancer. May cause damage to organs (respiratory system) through prolonged or repeated exposure (Inhalation).

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

Diethylene Glycol-phthalic Anhydride Polymer

LC50 - Fish [1]	≥ 100 mg/l
ErC50 algae	157.4 mg/l

Diethylene glycol

LC50 - Fish [1]	75200 mg/l
EC50 96h - Algae [1]	6500 – 13000 mg/l
EC50 96h - Algae [2]	9362 mg/l
NOEC (chronic)	≥ 1000 mg/l

Ethylene Glycol

LC50 - Fish [1]	> 72860 mg/l
EC50 - Crustacea [1]	> 100 mg/l
NOEC (chronic)	≥ 1000 mg/l
NOEC chronic fish	32000 mg/l (7 days)
NOEC chronic crustacea	24000 ml/l (48h)

N'-[3-(dimethylamino)propyl]-N,N,N'-trimethyl-propane-1,3-diamine

LC50 - Fish [1]	≈ 92.5 mg/l
EC50 - Crustacea [1]	35.4 mg/l
EC50 72h - Algae [1]	34.99 mg/l
NOEC (chronic)	2.2 mg/l

12.2. Persistence and degradability

No additional information available.

12.3. Bioaccumulative potential

Diethylene Glycol-phthalic Anhydride Polymer

Partition coefficient n-octanol/water (Log Pow)	0.9 – 1.9
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Diethylene glycol

Partition coefficient n-octanol/water (Log Pow)	-1.47
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Ethylene Glycol

Bioaccumulative potential	Does not bioaccumulate.
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12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Disposal methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations. Dispose of this material and its container at hazardous or special waste collection point. Refer to all applicable national, international and local regulations or provisions.
Additional information	: Do not re-use empty containers.
Ecological waste information	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

DOT	IMDG	IATA
14.1. UN number		
Not regulated for transport		
14.2. Proper Shipping Name		
Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)		
Not regulated	Not regulated	Not regulated
14.4. Packing group		
Not regulated	Not regulated	Not regulated
14.5. Environmental hazards		
Not regulated	Not regulated	Not regulated
No supplementary information available		

14.6. Special precautions for user

DOT
Not regulated

IMDG
Not regulated

IATA
Not regulated

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Bis(2-hydroxyethyl) (methylenedi-1,4-phenylene)biscarbamate	CAS-No. No Data	0.1 – 0.5%
Bis[2-(2-hydroxyethoxy)ethyl] (methylenedi-1,4-phenylene)biscarbamate	CAS-No. No Data	0.1 – 0.5%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Ethylene Glycol	CAS-No. 107-21-1	1.1 – 6%
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Ethylene Glycol (107-21-1)

Listed on EPA Hazardous Air Pollutant (HAPS)

CERCLA RQ	5000 lb
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15.2. International regulations

CANADA

Polyether Polyol (9082-00-2)

Listed on the Canadian DSL (Domestic Substances List)

Diethylene Glycol-phthalic Anhydride Polymer (32472-85-8)

Listed on the Canadian DSL (Domestic Substances List)

Diethylene glycol (111-46-6)

Listed on the Canadian DSL (Domestic Substances List)

Ethylene Glycol (107-21-1)

Listed on the Canadian DSL (Domestic Substances List)

N'-[3-(dimethylamino)propyl]-N,N,N'-trimethyl-propane-1,3-diamine (3855-32-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available.

National regulations

Polyether Polyol (9082-00-2)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

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Diethylene glycol (111-46-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethylene Glycol (107-21-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

⚠ WARNING: This product can expose you to chemicals including 1,4-Dioxane, which is known to the State of California to cause cancer, and Ethylene Glycol, 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.

SECTION 16: Other information

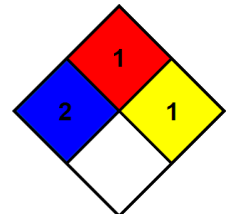
Issue date: 10/11/2024

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Full text of hazard classes and H-statements

H227	Combustible liquid
H302	Harmful if swallowed
H319	Causes serious eye irritation
H320	Causes eye irritation
H373	May cause damage to organs through prolonged or repeated exposure
H412	Harmful to aquatic life with long lasting effects

NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.
NFPA reactivity : 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.



This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.