



Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form: Substance

Trade name: Polyol

Chemical name: ETHOXYLATED, PROPOXYLATED ETHYLENEDIAMINE

CAS No: 26316-40-5

Formula: (C₃H₆O.C₂H₈N₂.C₂H₄O)

Synonyms: Ethylenediamine, ethoxylated and propoxylated / Polymer, 1,2-ethanediamine with methyloxirane and oxirane / 1,2-Ethanediamine, polymer with 2-methyloxirane and oxirane / Tetronic 304 surfactant / Ethylene oxide-propylene oxide copolymer ethylenediamine ether / Ethylene oxide-propylene oxide copolymer ether with ethylenediamine / Oxirane, 2-methyl-polymer with oxirane, 1,2-Ethanediamine ether / Ethylenediamine, ethoxylated and propoxylated / Polymer, 1,2-ethanediamine with methyloxirane and oxirane / 1,2-Ethanediamine, polymer with 2-methyloxirane and oxirane / Tetronic 304 surfactant / Ethylene oxide-propylene oxide copolymer ethylenediamine ether / Ethylene oxide-propylene oxide copolymer ether with ethylenediamine / Oxirane, 2-methyl-polymer with oxirane, 1,2-Ethanediamine ether

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture: chemical intermediate for urethane polymer production

1.3. Details of the supplier of the safety data sheet

Railroad Solutions

100 South Santa Fe Drive

Denver, CO 80223 - USA

Phone: 303.777.9692 email: raab@r-sols.com website: www.r-sol.com

1.4 Emergency Telephone: 24 HR CHEMTREC - 1-800-424-9300

24 HR Emergency Assistance - 1-270-422-6860

Section 2: Hazards Identification

2.1 Classification of the substance or mixture:

Classification according to GHS

Eye Irrit. 2; H319

Skin Sens. 1; H317

Full text of H-phrases: see section 16

2.2 Label elements:

GHS-US labeling

Hazard pictograms (GHS-US)



Signal word (GHS-US): Warning

Hazard statements (GHS-US): H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

Precautionary statements (GHS-US):

P261 - Avoid breathing fume spray, vapors

P264 - Wash hands thoroughly after handling

P272 - Contaminated work clothing must not be allowed out of the workplace

P280 - Wear eye protection protective clothing, protective gloves

P302+P352 - If on skin: Wash with plenty of water

P305+P351+P338 - If in eyes Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P321 - Specific treatment (see a doctor on this label)

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention



Section 2: Hazards Identification, continued

P337+P313 - If eye irritation persists: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

Section 3: Composition/information on ingredients

3.1. Substance

Common Name	Product Identifier	%	Classification (GHS-US)
Ethoxylated, Propoxylated Ethylenediamine (Main constituent)	(CAS No) 26316-40-5	99-100	Eye Irrit. 2A, H319 Skin Sens. , H317

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

Section 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation: Allow victim to breathe fresh air. Allow the victim to rest.

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 with plenty of soap and water. If skin irritation or rash occurs: Gently wash with plenty of soap and water, Get medical advice/attention. Get medical advice/attention. Specific treatment (see Wash skin with plenty of water on this label). Wash contaminated clothing before reuse.

First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Consult an eye specialist. Get medical advice/attention.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause an allergic skin reaction.

Symptoms/injuries after eye contact: Causes serious eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available



Section 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Foam. Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture No additional information available

5.3. Advice for firefighters

Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Equip cleanup crew with proper protection.

Emergency procedures: Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

Section 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing fume, spray, vapors.

Hygiene measures: Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Ignition sources. Incompatible materials. Keep container closed when not in use.

Incompatible products: Strong bases. Strong acids.

Incompatible materials: Sources of ignition. Direct sunlight.

7.3. Specific end use(s)

No additional information available



Section 8: Exposure controls/personal protection

8.1. Control parameters

ETHOXYLATED, PROPOXYLATED ETHYLENEDIAMINE (26316-40-5)

ACGIH Not applicable

OSHA Not applicable

8.2. Exposure controls

Personal protective equipment: Avoid all unnecessary exposure.

Hand protection: Wear protective gloves.

Eye protection: Chemical goggles or safety glasses.

Respiratory protection: Wear appropriate mask.

Other information: Do not eat, drink or smoke during use

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: Colorless to pale yellow liquid.

Color: Colorless to yellow

Odor: mild

Odor threshold: No data available

pH: 10- 11.9 (@ 25 Deg. C)

Melting point: No data available

Freezing point: No data available

Boiling point: No data available

Flash point: 252°C

Relative evaporation rate (butyl acetate=1): No data available

Flammability (solid, gas): No data available

Explosion limits: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Vapor pressure: < 1 mm Hg (@ 25 Deg. C)

Relative density: 1-1.1

Relative vapor density at 20°C: No data available

Specific gravity / density: 1 -1.1 g/ml

Molecular mass : - 500 g/mol

Solubility: Insoluble in water.

Log Pow: No data available

Log Kow: No data available

Auto-ignition temperature: No data available

Decomposition temperature: No data available

Viscosity: No data available

Viscosity, kinematic: No data available

Viscosity, dynamic: No data available

9.2. Other information

No additional information available



Section 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products fume.

Carbon monoxide. Carbon dioxide.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)	
LD50 oral (rat)	3 - 5 g/kg
LD50 dermal (rabbit)	> 2000 mg/kg
ATE US (oral)	3000.000 mg/kg body weight

Skin corrosion/irritation: Not classified. pH: 10 -11.9 (@25 Deg. C)

Serious eye damage/irritation: Causes serious eye irritation. pH: 10 -11.9 (@25 Deg. C)

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

Specific target organ toxicity (single exposure): Not classified

Specific target organ toxicity (repeated exposure): Not classified

Aspiration hazard: Not classified

Potential Adverse human health effects and symptoms: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation: May cause an allergic skin reaction.

Symptoms/injuries after eye contact: Causes serious eye irritation.



Section 12: Ecological information 1

12.1. Toxicity

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

LC50 fish 1 > 100 mg/l

12.2. Persistence and degradability

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Persistence and degradability. Not established.

12.3. Bioaccumulative potential

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Bioaccumulative potential. Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Other information : Avoid release to the environment.

Section 13: Disposal Considerations

13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Ecology - waste materials: Avoid release to the environment

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated for transport

Additional information

Other information: No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

Section 15: Regulatory information

15.1. US Federal

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Listed on the Canadian DSL (Domestic Substances List)



Section 15: Regulatory information continued

EU Regulations

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Listed on the EU NLP (No Longer Polymers) inventory

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Not classified

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

National regulations

Ethoxylated, Propoxylated Ethylenediamine (26316-40-5)

Listed on the AICS (Australian Inventory of Chemical Substances)

Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Listed on the Japanese ENCS (Existing & New Chemical Substances) inventory

Listed on the Korean ECL (Existing Chemicals List)

Listed on NZIoC (New Zealand Inventory of Chemicals)

Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Listed on INSQ (Mexican national Inventory of Chemical Substances)

Listed on Turkish inventory of chemical

15.3. US State regulations

Section 16: Other information

Revision date: January 1, 2021

Other information: None

Full text of H-phrases:

Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Skin Sens. 1	Skin sensitization Category 1
H317	May cause an allergic skin reaction
H319 Causes serious eye irritation	Causes serious eye irritation

SOS US (GHS HazCom 2012)

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