Safety Data Sheet · OSHA HCS 2024

100% Ethylene Glycol Inhibited

Inhibited · 98.0-100.0% w/w ethylene glycol

Standard	Revised	Emergency
OSHA HCS 2024 · GHS Rev. 7	2026-11-12	Chemtel 1-800-255-3924 (24/7)

1 Identification

Product Identifier	100% Ethylene Glycol Inhibited
Grade	Inhibited
Concentration	98.0-100.0% w/w ethylene glycol
CAS Number	Mixture (see Section 3)
Chemical Formula	C2H6O2
Molecular Weight	62.07 g/mol
Manufacturer	Alliance Chemical 204 South Edmond Street, Taylor, TX 76574
Emergency Phone	Chemtel 1-800-255-3924 (24/7)
Recommended Use	Closed-loop heat-transfer and freeze-protection fluid. Not for food-contact, incidental-food-contact or potable-water service. See Section 7.
Restrictions on Use	Not for food-contact, incidental-food-contact or potable-water service.

2 Hazard Identification



Irritant / harmful



Health hazard

Classification	Acute toxicity (oral), Category 4 Specific target organ toxicity, repeated exposure, Category 2
Signal Word	**Warning**
Hazard Statements	H302 Harmful if swallowed H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

P260 Do not breathe dust, fume, gas, mist, vapors or spray.

P264 Wash hands and face thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.

P314 Get medical advice or attention if you feel unwell.

P330 Rinse mouth.

P501 Dispose of contents and container in accordance with local, regional, national, and international regulations.

Classification, hazard (H) and precautionary (P) statements and pictograms per OSHA HCS 2024 (29 CFR 1910.1200, Appendices A–C), aligned with GHS Rev. 7.

3 Composition / Information on Ingredients

Component	CAS No.	Formula	Concentration
Ethylene Glycol	107-21-1	$C_2H_6O_2$	98.0-100.0% (w/w)
Corrosion inhibitor package (nitrite-containing hybrid organic-acid)	Mixture	Mixture	<2% (w/w)
Sodium Nitrite (in inhibitor package)	7632-00-0	$NaNO_2$	<0.4% (w/w)
Triethanolamine (in inhibitor package)	102-71-6	$C_6H_{15}NO_3$	<0.2% (w/w)
Sodium Benzoate (in inhibitor package)	532-32-1	$C_7H_5NaO_2$	<0.06% (w/w)
Sodium Molybdate Dihydrate (in inhibitor package)	10102-40-6	$Na_2MoO_4 \cdot 2H_2O$	<0.04% (w/w)

Concentrations are nominal; lot-specific values appear on the Certificate of Analysis. Components not contributing to classification are omitted.

4 First-Aid Measures

Eyes
Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.

Skin
Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.

Inhalation
Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion
Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

Most Important Symptoms and Effects
Ingestion may cause nausea, vomiting and abdominal pain; larger amounts may cause systemic poisoning.

Immediate Medical Attention and Special Treatment
Treat symptomatically. Get medical attention if symptoms develop or persist.

5 Fire-Fighting Measures

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical, or CO2. Use measures appropriate to local circumstances.

Unsuitable Extinguishing Media
Do not use a solid water stream as it may scatter and spread fire.

Specific Hazards Arising from the Chemical
Containers may rupture when heated.

Protective Equipment	Wear self-contained breathing apparatus and full protective clothing.
Hazardous Combustion Products	Carbon monoxide and carbon dioxide on combustion; aldehydes and other carbonyl compounds when overheated.

6 Accidental Release Measures

Personal Precautions	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental Precautions	Prevent leakage or spillage from entering drains, sewers, or waterways.
Containment & Cleanup	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

7 Handling and Storage

Safe Handling	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
Safe Storage	Store in a cool, dry, well-ventilated area. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.
Specific Storage Precautions	Keep tightly closed (hygroscopic) in a cool, dry place away from oxidizers. Store separately from food and drink.

8 Exposure Controls / Personal Protection

Occupational Exposure Limits

Limit	Value
ACGIH TLV	25 ppm TWA / 50 ppm STEL; 10 mg/m³ STEL (inhalable)

Engineering Controls	Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.
Eye/Face Protection	Wear chemical safety goggles or face shield.
Skin Protection	Wear chemical-resistant gloves and protective clothing.
Respiratory Protection	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

Exposure limits sourced from NIOSH Pocket Guide, OSHA 29 CFR 1910.1000 and ACGIH TLVs.

9 Physical & Chemical Properties

Appearance	Clear viscous liquid
Odor	Odorless
Odor Threshold	No data available
pH	Typically 7.0-9.0 as a 50% solution in water (ASTM D1287); measured value reported on the lot Certificate of Analysis
Melting Point / Freezing Point	About 9 °F (-13 °C) for the concentrate (ethylene glycol, NTP 1992); freeze point of a 50 vol % solution in water: -34 °F (-36.7 °C) max (ASTM D1177)
Boiling Point	387.7 °F at 760 mmHg (NTP, 1992)
Flash Point	232 °F (NTP, 1992)

Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Upper/Lower Flammability or Explosive Limits	No data available
Vapor Pressure	0.06 mmHg at 68 °F ; 1 mmHg at 127.4 °F (NTP, 1992)
Vapor Density	No data available
Relative Density	1.110-1.125 at 60 °F
Solubility	greater than or equal to 100 mg/mL at 63.5 °F (NTP, 1992)
Partition Coefficient (n-octanol/water)	No data available
Auto-ignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Particle Characteristics	Not applicable
Form	Liquid
Density	1.115 g/cm^3 at 68 °F (USCG, 1999)

Values shown reflect product-specific canonical data. Lot-specific ranges may vary; see the Certificate of Analysis for the shipped lot.

10 Stability and Reactivity

Reactivity	Not reactive under normal conditions of use and storage.
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	High heat (above 40 °C in storage), open flame, and moisture (hygroscopic).
Incompatible Materials	Strong oxidizing agents, strong acids and bases, aldehydes, alkali and alkaline-earth metals, aluminum compounds.
Hazardous Decomposition Products	Carbon monoxide and carbon dioxide on combustion; aldehydes and other carbonyl compounds when overheated.

11 Toxicological Information

See Section 2 for GHS hazard classification.

Likely Routes of Exposure	Inhalation, skin contact, eye contact, ingestion.
Symptoms	Ingestion may cause nausea, vomiting and abdominal pain; larger amounts may cause systemic poisoning.
Delayed and Chronic Effects	Prolonged or repeated exposure may damage organs.
Numerical Measures of Toxicity	No data available

Carcinogen Classification

Agency	Status
IARC	Group 2A — probably carcinogenic to humans (Sodium nitrite; IARC agent: Ingested nitrate or nitrite under conditions that result in endogenous nitrosation, Vol. 94).

Agency	Status
NTP	Not listed as carcinogen.
OSHA	No substance-specific standard in 29 CFR 1910 Subpart Z; not classified as a carcinogen under the Hazard Communication Standard (29 CFR 1910.1200) as supplied. See Section 2 and the scope note.

Scope: the IARC evaluation addressed nitrate or nitrite ingested under conditions that result in endogenous nitrosation, not this product as supplied; nitrites can react with secondary and tertiary amines to form nitrosamines, which are potentially carcinogenic.

12 Ecological Information

Ecotoxicity	Daphnia EC50: 10000 mg/L (48 h, Daphnia magna (freshwater, static))
Persistence & Degradability	Not persistent; low bioconcentration, not expected to volatilize
Bioaccumulative Potential	log Kow −1.36
Mobility in Soil	Very high mobility in soil (estimated Koc ≈ 0.2)

13 Disposal Considerations

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

14 Transport Information

Not regulated for transport under US DOT 49 CFR Subchapter C, IMDG, or IATA DGR in packages holding less than the reportable quantity below.

Hazardous substance (49 CFR 171.8)	A single package holding 5,000 lb (2,270 kg) or more of this product contains the reportable quantity (RQ) of a hazardous substance and is regulated as a hazardous material.
Reportable quantity (49 CFR 172.101 Appendix A)	Sodium nitrite — RQ 100 lb (45.4 kg); Ethylene glycol — RQ 5,000 lb (2,270 kg)
Shipping description (package at or above the RQ)	UN3082, Environmentally hazardous substance, liquid, n.o.s. (Sodium nitrite, Ethylene glycol), 9, III, RQ

15 Regulatory Information

Inventory / List	Status
California Proposition 65	Listed as ethylene glycol (ingested) (since 2015-06-19)
US EPA TSCA Active Inventory	Listed
EPCRA SARA 313 (TRI)	Listed
CERCLA Reportable Quantity (RQ)	Sodium nitrite (CAS 7632-00-0) — RQ 100 lb (45.4 kg); Ethylene glycol (CAS 107-21-1) — RQ 5,000 lb (2,270 kg)

SARA 311/312 hazard categories correspond to the GHS classification in Section 2. Data retrieved as of: California Proposition 65 2026-11-02; US EPA TSCA Active Inventory 2026-11-02; EPCRA SARA 313 (TRI) 2026-11-02.

16 Other Information

Revision Date	2026-11-12
Format	16-section format per OSHA HCS 2024 (29 CFR 1910.1200, Appendix D), aligned with GHS Rev. 7.

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