

Safety Data Sheet
ETC-MIS-29533G (MIS-29533 Rev G) Liquid Cooling System Coolant



ENCINO TRADING COMPANY, INC.

Safety Data Sheet
ETC-MIS-29533G (MIS-29533 Rev G) Liquid Cooling System Coolant

SECTION 1: Identification

1.1 GHS Product identifier

Product name	ETC-MIS-29533G (MIS-29533 Rev G) Liquid Cooling System Coolant
Product number	ETC-MIS-29533G (MIS-29533 Rev G) Liquid Cooling System Coolant
Brand	JMN

1.2 Other means of identification

ETC-MIS-29533G
MIS-29533 Rev G

1.3 Recommended use of the chemical and restrictions on use

Recommended use of the Chemical: A pre-mixed, uninhibited ethylene glycol formulation used in various aerospace, vehicular, and specialized industrial or military cooling applications.
Restrictions on use: For industrial and professional use only. Not for household, food, or pharmaceutical use.

1.4 Supplier's details

Manufacturer Name	JMN Specialties, Inc.
Address	1100 Victory Drive Westwego, Louisiana USA 70094 USA
Exclusively Blend For Address	Encino Trading Company, Inc. 15915 Ventura Blvd., # 204 Encino CA 91436 USA
Telephone	(818) 501-9105
Fax	(818) 501-0643
email	sales@etc-america.com

1.5 Emergency phone number

INFOTRAC: Inside the U.S.: 800-535-5053 (24 HOURS). Outside the U.S.: 352-323-3500 (24 HOURS).

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2024)

- Acute toxicity, oral (C.4.1), Cat. 4
- Specific target organ toxicity, repeated exposure (C.4.12), Cat. 2

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SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	The severity of symptoms depends on the concentration and duration of exposure. Ingestion of ethylene glycol-containing products may result in delayed toxic effects, including metabolic acidosis and kidney injury; prompt medical evaluation is recommended even if symptoms are not immediately apparent. Individuals with pre-existing kidney, liver, respiratory, or skin conditions may be more susceptible to the effects of exposure. Provide supportive care and treat symptomatically. Ensure adequate ventilation when handling heated product or mist-generating operations.
If inhaled	Remove exposed person to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, provide oxygen by qualified personnel. Seek medical attention if symptoms persist or worsen.
In case of skin contact	Wash affected skin thoroughly with soap and water. Remove contaminated clothing and shoes. Launder contaminated clothing before reuse. Seek medical attention if irritation develops or persists.
In case of eye contact	Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention if irritation persists or vision changes occur.
If swallowed	If swallowed, rinse mouth with water. Do NOT induce vomiting unless directed by medical personnel. Never give anything by mouth to an unconscious person. Immediately contact a poison center or physician. Ethylene glycol ingestion may cause central nervous system depression, metabolic acidosis, and kidney injury.
Personal protective equipment for first-aid responders	Wear appropriate protective gloves and eye protection when assisting exposed individuals.

4.2 Most important symptoms/effects, acute and delayed

Ingestion may initially produce intoxication-like symptoms including headache, dizziness, drowsiness, nausea, vomiting, abdominal discomfort, slurred speech, and central nervous system depression. Delayed effects may include metabolic acidosis, rapid breathing, cardiovascular effects, and kidney damage. Eye contact may cause temporary irritation, redness, and tearing. Prolonged or repeated skin contact may result in mild irritation or drying of the skin. Inhalation of heated vapors or mists may irritate the respiratory tract.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

Immediate medical attention is recommended following ingestion. Early treatment is important to prevent metabolic acidosis and renal injury associated with ethylene glycol poisoning. Treatment may include correction of acidosis and administration of antidotal therapy such as fomepizole or ethanol under medical supervision. Monitor renal function, electrolyte balance, and acid-base status. Treat symptomatically and supportively.

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media

Suitable Extinguishing Media: Use water fog, alcohol-resistant foam, dry chemical powder, or carbon dioxide (CO₂). Use extinguishing media appropriate for surrounding materials and conditions.
Unsuitable Extinguishing Media: Do not use high-pressure water streams directly on burning liquid, as this may spread the fire.

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5.2 Specific hazards arising from the chemical

This product is not readily flammable due to its water content; however, ethylene glycol residue remaining after water evaporation may burn under fire conditions. Containers exposed to excessive heat may rupture due to pressure buildup. Thermal decomposition and combustion may generate toxic and irritating gases including carbon monoxide, carbon dioxide, aldehydes, ketones, and organic acids.

5.3 Special protective actions for fire-fighters

Firefighters should wear self-contained breathing apparatus (SCBA) and full protective firefighting clothing. Use water spray to cool fire-exposed containers and surrounding equipment. Avoid inhalation of smoke, vapors, or decomposition products. Contain runoff from firefighting activities to prevent environmental contamination.

Further information

Approach fire from upwind to avoid hazardous vapors and decomposition products. Move containers from the fire area if it can be done safely. Dike and collect contaminated firefighting water for proper disposal in accordance with applicable regulations. Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment as described in Section 8. Avoid contact with skin, eyes, and clothing. Avoid breathing mist or vapor. Ensure adequate ventilation, especially in enclosed areas. Remove unnecessary personnel from the spill area. Exercise caution, as spilled product may create slippery surfaces.

6.2 Environmental precautions

Prevent release into the environment. Avoid discharge to drains, surface waters, groundwater, or soil. Large releases may contribute to oxygen depletion in aquatic environments during biodegradation. Ethylene glycol-containing materials may be harmful to animals if ingested.

6.3 Methods and materials for containment and cleaning up

Stop leak if it can be done safely. Contain spill with inert absorbent material such as sand, clay, vermiculite, or commercial absorbent. Prevent spill from entering drains, sewers, waterways, or soil. Collect absorbed material into suitable containers for disposal in accordance with applicable regulations. Flush residual material with water after physical cleanup is complete. Large spills may be recovered by pumping into salvage containers for recycling or disposal.

Reference to other sections

See protective measures in Sections 7 and 8. Disposal considerations in Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes, skin, and clothing. Do not ingest. Avoid breathing mist, vapor, or heated decomposition products. Use with adequate ventilation, particularly in enclosed or poorly ventilated areas. Wash thoroughly after handling and before eating, drinking, smoking, or using restroom facilities. Remove contaminated clothing and launder before reuse. Use good industrial hygiene and housekeeping practices. Keep containers tightly closed when not in use. Avoid contamination with incompatible materials, salts, or other coolant additives unless approved for the system design.

Special Handling Notes: Because this product is an uninhibited ethylene glycol solution intended for specialized cooling systems, contamination with tap water, corrosion inhibitors, automotive antifreeze additives, or process contaminants may adversely affect system performance and materials compatibility.

7.2 Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in a cool, dry, well-ventilated location away from excessive heat, open flames, sparks, and incompatible materials. Protect containers from physical damage and contamination. Avoid prolonged storage at elevated temperatures. Store away from strong oxidizing agents, strong acids, strong bases, and reactive metals. Keep from freezing if container rupture or damage may occur. Product should be stored in properly labeled containers constructed of compatible materials such as carbon steel, stainless steel, HDPE, or approved glycol-compatible plastics.

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Specific end use(s)

Apart from the uses mentioned in section 1, no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

CAS: 107-21-1 (EC: 203-473-3)

Ethylene glycol

ACGIH (USA): 100 mg/m³ PEL-C inhalation; 100 mg/m³ PEL-C inhalation; 100 mg/m³ PEL-C inhalation; AU/SWA (AU): 40 ppm; 104 mg/m³ STEL inhalation [Ethylene glycol (vapor)]; 10 mg/m³ TWA inhalation [Ethylene glycol (particulate)]; 20 ppm; 52 mg/m³ TWA inhalation [Ethylene glycol (vapor)]; Cal/OSHA (USA): 40 ppm, 100 mg/m³ PEL-C inhalation; EU/OSHA (EU): 52 mg/m³ IOELV-LTEL inhalation [Ethane-1,2-diol]; 20 ppm IOELV-LTEL inhalation [Ethane-1,2-diol]; 104 mg/m³ IOELV-STEL inhalation [Ethane-1,2-diol]; 40 ppm IOELV-STEL inhalation [Ethane-1,2-diol]

8.2 Appropriate engineering controls

Use adequate general or local exhaust ventilation to maintain airborne concentrations below applicable exposure limits. Ventilation should be sufficient to minimize exposure to vapors, mists, or heated decomposition products. Eyewash stations and safety showers should be readily accessible in areas where the product is handled.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms



Eye/face protection

Wear safety glasses with side shields or chemical splash goggles. Use face shield when splashing or misting conditions exist.

Skin protection

Wear chemical-resistant gloves such as nitrile, neoprene, PVC, or other glycol-resistant materials.

Body protection

Body Protection: Wear protective clothing. Clothing with full length sleeves and pants should be worn. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

General Hygiene Considerations: Do not eat, drink, or smoke while handling this product. Wash hands, face, and exposed skin thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. Launder contaminated clothing before reuse.

Respiratory protection

Respiratory protection is not normally required under normal conditions of use with adequate ventilation. If exposure limits are exceeded or mists/vapors are generated, use a NIOSH-approved respirator appropriate for the exposure conditions.

Thermal hazards

Use caution when handling heated material. Heated product may generate irritating vapors or mists and may cause thermal burns upon contact.

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Control banding approach

Control measures for this product should be selected based on the potential for exposure during handling, transfer, heating, or mist-generating operations.

Low Exposure Potential: General ventilation and standard industrial hygiene practices are normally adequate for closed handling systems and ambient-temperature transfer operations.

Moderate Exposure Potential: Use local exhaust ventilation and chemical-resistant gloves and eye protection where splashing, open handling, or extended contact may occur.

High Exposure Potential: For heated operations, aerosol generation, confined spaces, or large-scale spill response, use enhanced ventilation, chemical protective clothing, and appropriate respiratory protection including NIOSH-approved air-purifying or supplied-air respirators as necessary.

Selection of controls should consider process temperature, duration of exposure, ventilation effectiveness, and potential for mist or vapor formation.

Environmental exposure controls

Prevent uncontrolled release to the environment. Avoid discharge into drains, waterways, or soil. Use appropriate containment and spill-control measures during handling and transfer operations.

SECTION 9: Physical and chemical properties

Basic physical and chemical properties

Physical state	Liquid
Appearance	Clear liquid
Color	Clear, colorless
Odor	Mild glycol odor
Odor threshold	No data available.
Melting point/freezing point	Approximately -56°F to -67°F (-49°C to -55°C)
Boiling point or initial boiling point and boiling range	Approximately 215 – 220°F (102 – 104°C)
Flammability	Not Flammable
Lower and upper explosion limit/flammability limit	Lower Flammable Limit: Not applicable Upper Flammable Limit: Not applicable
Flash point	None expected for mixture
Explosive properties	Product is not explosive
Auto-ignition temperature	Not determined
Decomposition temperature	Not Determined
Oxidizing properties	Not oxidizing
pH	7.0 – 8.5
Kinematic viscosity	~5–7 cSt @ 25°C
Solubility	Complete
Partition coefficient n-octanol/water (log value)	No data available
Vapor pressure	<0.1 kPa

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Evaporation rate	Slower than water
Density and/or relative density	Approximately 8.99 – 9.02 lb/gal
Relative vapor density	>1 (air = 1)
Particle characteristics	Not applicable for this product

Further safety characteristics (supplemental)

Surface Tension: ~47–50 dynes/cm @ 25°C

VOC Content: 0%

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known under normal conditions.

10.2 Chemical stability

Stable under normal storage conditions.

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur. Product does not undergo dangerous reactions under normal conditions.

10.4 Conditions to avoid

Avoid excessive heat, open flames, sparks, hot surfaces, contamination, prolonged exposure to elevated temperatures, and contact with incompatible materials. Avoid conditions that may generate mists or vapors.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong alkalis, chromates, permanganates, peroxides, nitric acid, and reactive metals.

10.6 Hazardous decomposition products

Thermal decomposition or combustion may generate carbon monoxide, carbon dioxide, aldehydes, ketones, organic acids, and irritating or toxic vapors and fumes.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

Oral LD₅₀ (rat): ~4,700 mg/kg (low acute toxicity)

Dermal LD₅₀ (rat): ~4,700 mg/kg

Inhalation LC₅₀: Not available (low volatility, low risk)

Harmful if swallowed.

Skin corrosion/irritation

Not classified. Prolonged or repeated contact may cause mild irritation or defatting.

Serious eye damage/irritation

May cause mild temporary eye irritation.

Respiratory or skin sensitization

Not expected to be sensitizing based on tests of components or similar products. Product does not have significant respiratory or skin sensitization potential based on general hazard information

Germ cell mutagenicity

Based on the available information, it is unlikely that this mixture poses a significant germ cell mutagenicity risk.

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Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

Reproductive toxicity

Based on available data and the concentration present, the mixture does not meet the criteria for classification for reproductive toxicity under OSHA 29 CFR 1910.1200 (GHS).

Summary of evaluation of the CMR properties

This product is not classified as carcinogenic, mutagenic, or toxic to reproduction (CMR) under OSHA 29 CFR 1910.1200 and GHS criteria.

Carcinogenicity: Not classified.

Germ Cell Mutagenicity: Not classified.

Reproductive Toxicity: Based on available data and the concentration present, the mixture does not meet the criteria for classification for reproductive toxicity under OSHA 29 CFR 1910.1200 (GHS).

Based on available data for ingredients, this mixture is not expected to exhibit CMR hazards under normal industrial use conditions.

Specific target organ toxicity (STOT) - single exposure

Not classified.

Specific target organ toxicity (STOT) - repeated exposure

Category 2: May cause damage to kidneys through prolonged or repeated exposure if swallowed.

Aspiration hazard

Not expected.

Additional information

Medical Conditions Aggravated by Exposure: Pre-existing kidney, liver, respiratory, skin, or central nervous system disorders may be aggravated by exposure.

Toxicologically Synergistic Products: No information available.

SECTION 12: Ecological information

Toxicity

Fish (Product): Expected to have low acute toxicity; $LC_{50} > 100$ mg/L, based on similar products/components.

Aquatic Invertebrates (Product): Daphnia magna – Expected to have low toxicity; $EC_{50} > 100$ mg/L, based on similar products/components.

Chronic Toxicity – Fish (Product): NOEC/NOEL > 100 mg/L, based on similar products/components.

Chronic Toxicity – Aquatic Invertebrates (Product): NOEC/NOEL > 100 mg/L, based on similar products/components.

Toxicity to Aquatic Plants (Product): Algae – Expected to have low toxicity; $EC_{50} > 100$ mg/L, based on similar products/components.

Persistence and degradability

Ethylene glycol is readily biodegradable under aerobic conditions and is not expected to persist in the environment. The product is expected to degrade to carbon dioxide and water through normal biological processes.

Bioaccumulative potential

Ethylene glycol has a low potential for bioaccumulation due to its high water solubility and low partition coefficient.

Mobility in soil

Product is expected to be highly mobile in soil because it is completely soluble in water. Spills may migrate through soil and potentially contaminate groundwater if not contained.

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

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Endocrine disrupting properties
No components are known to exhibit endocrine-disrupting properties at the concentrations present in this product.

Other adverse effects
Large releases to waterways may contribute to biological oxygen demand (BOD) during biodegradation and may reduce dissolved oxygen levels in aquatic systems. Product may be harmful to animals if ingested in sufficient quantities.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Recover or recycle material whenever possible. Do not discharge into surface waters, storm drains, sanitary sewers, or soil. Incineration or disposal through a licensed chemical waste contractor is recommended for large quantities or contaminated product.

Packaging disposal
Empty containers may retain product residue and vapors. Do not reuse containers for food, beverage, or potable water storage. Dispose of contaminated packaging in accordance with applicable regulations.

Waste treatment
Unused product is not specifically listed as a hazardous waste under RCRA; however, waste characterization is the responsibility of the generator and depends on the conditions of use and disposal.

Sewage disposal
Not approved for disposal in sewage systems. Avoid release to the environment. Handle through an authorized waste treatment or disposal facility.

Other disposal recommendations
Unused product is not specifically listed as a hazardous waste under RCRA; however, waste characterization is the responsibility of the generator and depends on the conditions of use and disposal.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Component	CAS no.	RTK (US) for state:	TSCA (US) ¹	CA Prop. 65 ²	pfas ³
Ethylene glycol	107-21-1	MA, NJ, PA	P	x; r	-
Deionized Water	7732-18-5	-	P	-	-

¹ "P"—Public list, "C"—Confidential list. ² "c"—cancer, "r"—reproductive harm. ³ "pfas"—Per- and polyfluoroalkyl substances.

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Regulation	Applicability
Massachusetts Toxic Use Reduction Act (TURA) list	Chemical name: Ethylene glycol CAS number: 107-21-1 TRI listing: X-reportable; CERCLA listing: X-reportable; TURA-only listing: no; de minimis concentration threshold: 1 percent.
Minnesota Chemicals of High Concern (Minn. Stat. 116.9401)	Chemical name: Ethylene glycol (ingested) CAS number: 107-21-1 Health: developmental
Oregon High Priority Chemicals of Concern for Children's Health (HPCCH, ORS 431A.253)	Chemical name: Ethylene glycol CAS number: 107-21-1 (chronic effects)
SARA 302 Components	No chemicals in this material [Ethylene glycol] are subject to the reporting requirements of SARA Title III, Section 302.
SARA 302 Components	No chemicals in this material [Ethylene glycol] are subject to the reporting requirements of SARA Title III, Section 302.
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard for: Ethylene glycol.
SARA 311/312 Hazards	Acute Health Hazard, Chronic Health Hazard for: Ethylene glycol.
SARA 313 Components	The following components are subject to reporting levels established by SARA Title III, Section 313: Ethylene glycol CAS number: 107-21-1
Washington State Chemicals of High Concern to Children (WAC 173-334-130)	Chemical name: Ethylene glycol CAS number: 107-21-1

15.2 Chemical Safety Assessment

A Chemical Safety Assessment (CSA) has not been carried out for this mixture. (Under EU REACH, CSAs are performed for substances; this product is a mixture formulated from registered substances.)

Annex: Voluntary Chemical Safety Assessment (summary)

Ingestion: Ingestion of this product may be harmful due to the ethylene glycol content. Initial symptoms may resemble alcohol intoxication and can include nausea, vomiting, dizziness, headache, abdominal discomfort, drowsiness, and central nervous system depression. Delayed effects may include metabolic acidosis, cardiovascular effects, and kidney injury. Immediate medical attention is recommended following ingestion.

Eye Contact: Direct eye contact may cause mild to moderate irritation, including redness, tearing, stinging, and discomfort. Effects are generally temporary and reversible with prompt rinsing.

Skin Contact: Prolonged or repeated skin contact may cause mild irritation, redness, or drying of the skin. Significant dermal toxicity is not expected under normal industrial handling conditions, but good hygiene practices should be followed.

Respiratory Issues: Inhalation is not expected to be a significant exposure route under normal ambient-temperature use. Mists, aerosols, or heated vapors may irritate the nose, throat, and respiratory tract. Use adequate ventilation when handling heated material or during mist-generating operations.

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HMIS Rating

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HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	B

NFPA Rating



SECTION 16: Other information

This Safety Data Sheet has been revised as of the issue date indicated in the footer. Changes may include updates to composition, hazard classification, physical and chemical properties, toxicological information, and regulatory data. Previous versions should be discarded. Users are advised to review the entire document to ensure awareness of current information.

16.1 Further information/disclaimer

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, the Company makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the recipients will make their own determination as to its suitability for their intended purposes prior to use. The conditions of use, handling, storage, and disposal of this product are beyond the control of the Company and may involve variables and conditions that cannot be anticipated. The user is solely responsible for determining safe and appropriate conditions of use, including compatibility with other materials and compliance with all applicable federal, state, and local regulations. This product may react with other materials or under certain conditions to produce hazardous or unintended results. It is the responsibility of the user to evaluate and control such risks prior to use. The information provided in this Safety Data Sheet is based on current knowledge and is intended solely as guidance for safe handling, use, processing, storage, transportation, and disposal. It is not to be construed as a guarantee, product specification, or quality specification and does not establish a legally binding contractual relationship. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE WITH RESPECT TO THE INFORMATION OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

16.2 Preparation information

Prepared in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200), as revised in 2024, and aligned with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 7.