Safety Data Sheet

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1. IDENTIFICATION

Product: Laser Coolant, PN 202419.001.	MSDS #: 901516.001
Product Use: For laboratory use only.	Date: Rev A, February 11, 2015

2. HAZARDS IDENTIFICATION:

Classification & labeling according to GHS, OSHA, and Table 3.1 Annex VI of regulation 1272/2008/EU, as amended:
Classification: Hazard Class and Category: Acute toxicity, Category 4.

GHS/CLP/OSHA Label Elements: Pictogram(s): Signal Word(s): Warning. Hazard statement(s): Harmful if swallowed. Precautionary statements(s): Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product.

The small quantities supplied in our products are unlikely to cause severe or immediate health effects. Use only as directed and in accordance with safe laboratory practices.

3. COMPOSITION/INFORMATION ON INGREDIENTS:

				EXPOSURE LIMITS		
CHEMICAL INGREDIENT NAME	CAS NUMBER	EC NUMBER	% by Weight	OSHA	ACGIH	EU IOELV
Ethylene Glycol	107-21-1	203-473-3	50	NA	100 mg/m^3 C (aerosol)	20 ppm; 40 ppm STEL; Skin

Notes: Product is provided in a one liter jar, containing a 50/50 ethylene glycol/water solution. Exposure Limits are 8-Hour TWA (Time Weighted Average) unless designated C (Ceiling) or STEL (Short Term Exposure Limit). Skin notation means compound can be absorbed through the skin.

4. FIRST AID MEASURES:

Inhalation: Remove to fresh air.
Skin Contact: Flush with water.
Eye Contact: Immediately flush with water for a minimum of 15 minutes.
Ingestion: Get medical attention. The principal toxic effects of ethylene glycol, when swallowed, are kidney damage and metabolic acidosis. Ethanol is antidotal, and early administration may block the formation of toxic metabolites of ethylene glycol in the liver.

After following first aid measures, seek medical attention.

5. FIRE-FIGHTING MEASURES:

Flammable Properties: Combustible Liquid.
Extinguishing Media: Dry chemical, carbon dioxide or appropriate foam.
Unique Aspects Contributing To a Fire: None.
Special Fire Fighting Procedures: None.
Note: As in any fire, wear self-contained breathing apparatus, and full protective gear.

6. ACCIDENTAL RELEASE MEASURES:

Due to small quantities involved, spills or leaks should not pose a significant problem. Absorb liquid with spill pillow or other absorbent. Place wastes into closed containers for proper disposal.

7. HANDLING AND STORAGE:

Handle as directed and in accordance with safe laboratory practices.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Handle in accordance with safe laboratory practices.

Respiratory Protection: Not normally needed. If exposure limits are exceeded, use approved respirator.
Eye Protection: Safety glasses with side protection.
Skin Protection: Neoprene or other chemical resistant gloves. Disposable nitrile are acceptable for light intermittent exposure.
Engineering Controls: Work in a fume hood or use general or other local exhaust ventilation to meet Exposure Limits.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Clear liquid

Physical State: Liquid	**Flash Point: > 231°F (> 111°C)**	**Vapor Pressure: 0.092 mm Hg at 25 deg C**
Odor: None	**Explosion Limits: 3.2% – 15-%**	**Vapor Density (air=1): 2.1**
pH: NA	**Boiling Point: > 385°F (>197.3°C)**	**Solubility in Water: Soluble**
Specific Gravity: NA	**Melting Point: NA**	**Other: NA**

10. STABILITY AND REACTIVITY:

Hazardous Polymerization ☒**Will Not Occur** ☐**May Occur**

Stability: Stable

Hazardous Decomposition/Combustion Products:	**Conditions & Materials to Avoid:**
Carbon monoxide, Carbon dioxide.	**Strong acids, Strong oxidizing agents, Strong bases, Aldehydes, Aluminum.**

11. TOXICOLOGICAL INFORMATION:

Primary Route(s) of Exposure under Normal Use: Inhalation, skin contact.

Target Organ(s): Central nervous system, kidney.

Acute Effects: Irritating to eyes and upper respiratory tract. Ethylene glycol poses virtually no occupational exposure risk at room temperature due to its low vapor pressure; at elevated temperatures, however, exposures are possible and adverse effects have been reported as a result of exposure to mists.

LD50 Oral - Rat - 4,700 mg/kg; LD50 Dermal - Rabbit - 10,626 mg/kg; Eyes – Rabbit: Result: Mild eye irritation - 24 h.

Chronic Effects: Laboratory experiments have shown teratogenic effects based on studies in which high levels were given in drinking water. Inhalation and dermal exposure have not produced significant fetotoxicity or malformations in test animals.

Other Information: Chemical Component(s) not classified as carcinogen(s) by OSHA, IARC (Group 1/2), NTP (Group 1/2), or ACGIH (Group A1/A2). This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

12. ECOLOGICAL INFORMATION: NA

13. DISPOSAL CONSIDERATIONS: Consult state, local or national regulations for proper disposal. The U.S. Environmental Protection Agency (EPA) does not classify unused product as hazardous waste.

14. TRANSPORT INFORMATION: Not Dangerous Goods. Not Regulated.

IATA/ICAO: Shipping Name: NA **Hazard Class: NA** **UN/NA #: NA** **Packing Group #: NA**	**IMDG: NA** **ADR: NA**

15. REGULATORY INFORMATION:

U.S. TOSCA: Constituents listed.

Canada: This product has been classified according to the hazard criteria of the Controlled Product Registration (CPR) and this SDS contains all the information required by the CPR.

16. OTHER INFORMATION:

U.S. EPA

SARA 313 Chemicals	CERCLA RQ
Ethylene glycol	5000 lbs

National Fire Protection Association Rating

4=Severe Hazard	HEALTH	1
3=Serious Hazard	FLAMMABILITY	1
2=Moderate Hazard	REACTIVITY	0
1=Slight Hazard	OTHER	NA
0=Minimal Hazard		

Notes, abbreviations and acronyms:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
CAS: Chemical Abstracts Service (division of the American Chemical Society)
EC: European Commission
EU IOELV: European Union Indicative Occupational Exposure Limit Values
GHS: Globally Harmonized System of Classification and Labeling of Chemicals
IATA: International Air Transport Association
IMDG: International Maritime Code for Dangerous Goods
NA: Not Available.
OSHA: Occupational Safety and Health Administration

For laboratory use only. Not for drug, household or other uses.

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