SAFETY DATA SHEET

1. Identification

Name of the substance or mixture (trade name) **Couplant D**

Product code D-12 u8770026

Major recommended uses for the substance or mixture Couplant.

Specific restrictions for use of the substance or mixture Not available.

Manufacturer/Importer/Distributor information

Manufacturer

Supplier Evident Scientific

Address 48 Woerd Ave. Waltham, MA 02453, USA

Telephone +1 781-419-3900

Emergency telephone number CHEMTREC

US: 1-800-424-9300, International: +1 703-527-3887

2. Hazards identification

Classification of the substance or mixture

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

GHS labeling elements, including precautionary statements

Hazard symbol(s) None.

Signal word None.

Hazard statement(s) The mixture does not meet the criteria for classification.

Precautionary statement(s)

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Other hazards which do not result in classification None known.

Supplemental information None.

3. Composition/information on ingredients

Mixture

Common chemical name or technical name	CAS number	Concentration or concentration range
Propylene glycol	57-55-6	<35
Sodium molybdate	7631-95-0	<2

4. First-aid measures

First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed	Direct contact with eyes may cause temporary irritation.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Notes to physician	Treat symptomatically.

5. Fire-fighting measures

Means of fire extinguishing

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special fire fighting procedures	Move containers from fire area if you can do so without risk.
Protective measures taken by firefighting crews	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Control measures for spills and leaks

Personal precautions, protective equipment and emergency procedures

To be taken by those who are not involved in rendering emergency services	Avoid prolonged exposure. Keep unnecessary personnel away. In case of spills, beware of slippery floors and surfaces. For personal protection, see section 8 of the SDS.
To be taken by those who are involved in rendering emergency services	Keep unnecessary personnel away. Be aware of potential for surfaces to become slippery. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	Sweep or scoop up and remove. Wipe up with absorbent material (e.g. cloth, fleece). After cleaning, flush away traces with water. For waste disposal, see Section 13 of the SDS.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices. It is a good industrial hygiene practice to minimize skin contact. For prolonged or repeated skin contact use suitable protective gloves.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Control parameters	Follow standard monitoring procedures.

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Argentina. OELs. Law 19587 (Establishing the Conditions for Health and Safety in the Workplace) and Decree 351/79 Article 61, Annex III, as amended

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Chile. OELs. Decree No. 594, arts. 61 & 66: Regulating Basic Health and Environmental Conditions in the Workplace and Setting Permissible Levels of Exposure to Chemical and Physical Agents

Components	Type	Value
Sodium molybdate (CAS 7631-95-0)	TWA	4 mg/m3

Ecuador. OELs (INEN 2266:2013, 2013-01 2nd rev.: Transport, storage and handling of hazardous materials. Requirements. 1st ed., 1/29, 2013)

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Peru. OELs. Decreto Supremo 015-2005-SA (Reglamento sobre Valores Límites Permisibles para Agentes Químicos en el Ambiente de Trabajo)

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Venezuela. OELs. (COVENIN 2253: Permissible Environmental Concentration Limits for Chemical Substances in Workplaces and Biological Exposure Indices)

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m3	Respirable fraction.

Biological limit values No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Personal protective measures

Eyes and face protection If contact is likely, safety glasses with side shields are recommended. Eye wash fountain is recommended.

Skin protection

Hand protection For prolonged or repeated skin contact use suitable protective gloves. Suitable gloves can be recommended by the glove supplier.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state Liquid.

Form Viscous.

Color Light. Blue green.

Odor Mild.

Odor threshold Not available.

pH 8

Melting point/freezing point 5 °F (-15 °C)

Initial boiling point and boiling temperature range > 220 °F (> 104.44 °C)

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not applicable.

Flammability limit - upper (%)	Not applicable.
Vapor pressure	Not applicable.
Vapor density	1
Relative density	1.1 - 1.4 g/cc (Water = 1)
Solubility(ies)	100 %
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not available.
Viscosity	60000 cps Brookfield

Other physical and chemical parameters

Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.
VOC (Weight %)	< 1.5 % (Calculated)

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.
Symptoms	Direct contact with eyes may cause temporary irritation.

Components	Species	Test Results
Propylene glycol (CAS 57-55-6)		
Acute		
Dermal		
LD50	Rabbit	20800 mg/kg
Oral		
LD50	Rat	22000 mg/kg
Sodium molybdate (CAS 7631-95-0)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg
Inhalation		
LC50	Rat	> 1930 mg/m3
Oral		
LD50	Rat	4233 mg/kg

Skin irritation and corrosion	Prolonged skin contact may cause temporary irritation.
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

ACGIH Carcinogens

Sodium molybdate (CAS 7631-95-0) A3 Confirmed animal carcinogen with unknown relevance to humans.

Argentina. OELs. Law 19587 (Establishing the Conditions for Health and Safety in the Workplace) and Decree 351/79 Article 61, Annex III, as amended

Sodium molybdate (CAS 7631-95-0) A3 Confirmed animal carcinogen with unknown relevance to humans.

Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace

Sodium molybdate (CAS 7631-95-0) A3 Animal carcinogen.

Ecuador. OELs (INEN 2266:2013, 2013-01 2nd rev.: Transport, storage and handling of hazardous materials. Requirements. 1st ed., 1/29, 2013)

Sodium molybdate (CAS 7631-95-0) Group A3 Confirmed animal carcinogen with unknown relevance to humans.

Paraguay. Decree No. 14.390/92 that approves the General Technical Regulation of Safety, Hygiene and Medicine in the Workplace

Sodium molybdate (CAS 7631-95-0) A3 Confirmed animal carcinogen with unknown relevance to humans.

Venezuela. OELs. (COVENIN 2253: Permissible Environmental Concentration Limits for Chemical Substances in Workplaces and Biological Exposure Indices)

Sodium molybdate (CAS 7631-95-0) A3 Animal carcinogen.

Toxic to reproduction This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard Not an aspiration hazard.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components		Species	Test Results
Propylene glycol (CAS 57-55-6)			
Aquatic			
Acute			
Algae	EC50	Selenastrum capricornutum	19000 mg/l, 72 hours
Crustacea	LC50	Ceriodaphnia	18340 mg/l, 48 hours
Fish	LC50	Pimephales promelas	46500 mg/l, 96 hours
Sodium molybdate (CAS 7631-95-0)			
Aquatic			
Fish	LC50	Chinook salmon (Oncorhynchus tshawytscha)	> 1000 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Propylene glycol (CAS 57-55-6) -0.92

Bioconcentration factor (BCF) Not available.

Mobility in soil No data available for this product.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Considerations on final disposal

Recommended methods for final destination

Residual waste Dispose of in accordance with local regulations.

Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
Local disposal regulations	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

14. Transport information

National regulations

ANTT

Not regulated as dangerous goods.

International regulations

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.

15. Regulatory information

Federal regulations	This chemical product safety data sheet was prepared in accordance with the Brazilian Standard (ABNT NBR 14725-4: (Safety data sheet for chemicals (SDS))). The Chemicals Safety Information Card of the hazardous chemical can be obtained from a supplier.

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

16. Other information

Significant information, yet not specifically related to the previous sections	Not available.
Legends and abbreviations	LD50: Lethal Dose 50%. LC50: Lethal Concentration 50%.
Disclaimer	Evident Scientific cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.