



SAFETY DATA SHEET

1. Identification of the product

GHS product identifier Couplant D

Other means of identification

Product code D-12 u8770026

Recommended use of the chemical and restrictions on use

Recommended use Couplant.

Recommended restrictions None known.

Suppliers details

Supplier Olympus

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. Hazard identification

Classification of the substance or mixture

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

GHS label elements, including precautionary statements

Hazard symbols None.

Signal word None.

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

Precautionary statement

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

Mixtures

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
Propylene glycol		57-55-6	<35
Sodium molybdate		7631-95-0	<2

4. First-aid measures

Description of necessary 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.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

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 protective actions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Move containers from fire area if you can do so without risk.
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. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	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.
For emergency responders	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 to ensure 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

Occupational exposure limits

Dominican Republic. OELs (Regulation of Safety and Health in the Workplace - Decree No. 522-06 and Resolution No. 04-2007 of January 30, 2007) updated with ACGIH

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m ³	Respirable fraction.

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Sodium molybdate (CAS 7631-95-0)	TWA	0.5 mg/m ³	Respirable fraction.

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

Control banding approach Not available.

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.

Individual protection measures, such as personal protective equipment

Eye/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.
General hygiene considerations	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 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 information	
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.

Information on toxicological effects

Acute toxicity

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

Skin corrosion/irritation 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 This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

ACGIH Carcinogens

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

Other information Not available.

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		
<i>Acute</i>		
Algae	EC50	Selenastrum capricornutum
Crustacea	LC50	Ceriodaphnia
Fish	LC50	Pimephales promelas
Sodium molybdate (CAS 7631-95-0)		
Aquatic		
Fish	LC50	Chinook salmon (Oncorhynchus tshawytscha)

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

Bioaccumulative potential

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

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

Mobility in soil No data available.

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. Disposal considerations

Disposal methods

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products 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.

14. Transport information

ANTT

Not regulated as dangerous goods.

DOT

Not regulated as dangerous goods.

SCT

Not regulated as dangerous goods.

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

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information**Revision date**

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List of abbreviations

LD50: Lethal Dose 50%.

LC50: Lethal Concentration 50%.

Disclaimer

Olympus 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.