

**Section 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name: Paste Lubricant
Chemical name of the substance: Propanediol
CAS Number: 57-55-6
EC Number: 200-338-0
REACH Number: 01-2119456809-23-0003
01-2119456809-23-0008
01-2119456809-23-0009
01-2119456809-23-0043
01-2119456809-23

1.2 Relevant identified uses of the substance or mixture and uses advised against

Specified uses: Used in coatings.

1.3 Details of the supplier of the safety data sheet

Company name: WoodUbend Ltd.
Unit V, Scotch Park Trading Estate
Forge Ln
Leeds, LS12 2PR
Tel: +44 (0) 113 289 1222
Fax: n/a
Email: info@woodubend.com

1.4 Emergency telephone number

European Emergency Tel.: 112

Section 2: Hazards identification**2.1 Classification of the substance or mixture**

Classification according to Regulation EC No 1272/2008 CLP:

Non-hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling according to Regulation EC No 1272/2008 CLP:

Non-hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.3 Other hazards

No further relevant information available.

Section 3: Composition/information on ingredients**3.1 Substance**

This product is one substance.

CAS No./ EC No./	REACH No.	Concentration	Substance	Classification: regulation (EC) No 1272/2008
CAS: 57-55-6 EC: 200-338-0	01-2119456809-23	> 99.8%	Propanediol	Not classified

If present in the product, any non-classified ingredients, which are disclosed above and for which no country-specific occupational exposure limit (OEL) value is listed in section 8, are disclosed as voluntarily disclosed ingredients.

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SECTION 4: First aid measures

4.1. Description of first aid measures

General information: If there is a possibility of exposure, see Section 8 for special personal protective equipment.

After inhalation: In case of exposure, move to fresh air. Consult a doctor.

After skin contact: Wash with plenty of water.

After eye contact: Flush eyes with plenty of water for several minutes. Remove the contact lenses after the first 1-2 minutes and continue rinsing for a few more minutes. If effects occur, consult a doctor, preferably an ophthalmologist.

After swallowing: Never administer fluids or induce vomiting to unconscious or convulsing patients.

4.2. Most important symptoms and effects, both acute and delayed

In addition to the information contained in "Description of first aid measures" (above) and "Indication of any immediate medical attention and special treatment needed" (below), any additional important symptoms and effects are described in Section 11: Toxicological information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: No specific antidote. Supportive treatment. Treatment is based on the doctor's judgment, depending on the patient's reactions.

SECTION 5: Firefighting Measures

5.1 Extinguishing media

Water mist or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant (ATC type) foams are preferred if available. General purpose synthetic foams (including AFFF types) or protein foams can be used, but with less effectiveness.

Unsuitable extinguishing media: Do not use a direct stream of water. It can spread the fire.

5.2 Special hazards arising from the substance or mixture

Hazardous Combustion Products: In a fire, smoke may contain the parent substance along with unidentified toxic and/or irritant compounds. Hazardous combustion products may include, but are not limited to, the following: Carbon monoxide. Carbon dioxide.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire. Violent generation of steam or explosion may occur after direct addition of stream of water to hot liquids.

5.3 Advice for firefighters

Fire Fighting Procedures: Remove people, isolate fire area and prohibit unnecessary entry. Use water spray to cool containers exposed to the fire as well as the wider area affected by the fire until the fire is extinguished, and the risk of re-ignition is reduced. Fight the fire from a protected position or a safe distance. Consider using remote control devices for water hoses or nozzle monitoring. Immediately remove all persons from the area if you hear a noise from the safety valve or notice discoloration of the container. Flammable liquids can be extinguished by diluting them with water. Do not use a stream of water. Fire may spread. Remove container from fire area if possible and not dangerous. Flammable liquids can be flushed away with plenty of water to protect personnel and minimize the risk of property damage.

Special protective equipment for firefighters: Wear positive pressure self-contained breathing apparatus and fireproof protective clothing (including firefighter's helmet, coveralls, trousers, boots, and neoprene gloves). If protective equipment is not available or not in use, fight the fire from a protected position or a safe distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment, and emergency procedures:

Use the necessary safety equipment. For more information, see Section 8, Controlled exposure/ Personal protection. Do not let them enter the area staff members who are not essential and are not wearing protective equipment. Keep personnel away from low-lying areas.

6.2 Environmental precautions:

Prevent entry into soil, ditches, sewers, waterways and/or groundwater. See Ecological Information, Section 12.

6.3 Methods and material for containment and cleaning up:

Contain spilled material if possible.

Small spills: Any absorbent material. Collect in appropriate open containers with appropriate labelling. Wash the area where the drops were spilled with plenty of water.

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Large amounts of spilled material: Trench area containing spilled liquid. Pump into suitable and correctly labelled containers. For more information, see Section 13.

6.4 Reference to other sections:

References to other sections, if applicable, have been provided in the previous subsections.

Section 7: Handling and storage

7.1 Precautions for safe handling

Handling of the product at high temperatures may require additional ventilation or a local ventilation system. Trace amounts of these organic materials poured into hot fibrous insulations can cause auto-ignition temperatures to decrease, possibly resulting in spontaneous combustion. See Section 8.

7.2 Conditions for safe storage, including any incompatibilities

Protect the product from direct sunlight or ultraviolet radiation. Close container tightly when not in use. Store in a dry place. Protect from atmospheric moisture. Store in the following materials: stainless steel, aluminium. The container is lined with an FDA-approved phenolic or epoxy-phenolic coating for food contact. 316 Stainless steel. Opaque HDPE (high density polyethylene) plastic container.

No special storage measures are required.

Storage stability:

Shelf Life: Use within 24 Months.

7.3 Specific end use(s): For more information see the technical data sheet for the product.

SECTION 8: Exposure controls/personal protection

Exposure limit values are given below, if applicable:

Component	Directive	Entry type	Value / Note
Propanediol	US WEEL	TWA	10 mg/m3

No Impact Level

Workers

Acute systemic complications		Acute local complications		Long-term systemic complications		Long-term local complications	
Skin	Inhalation	Skin	Inhalation	Skin	Inhalation	Skin	Inhalation
n.a.	n.a.	n.a.	n.a.	n.a.	168 mg/m3	n.a.	10 mg/m3

Customers

Acute systemic complications			Acute local complications		Long-term systemic complications			Long-term local complications	
Skin	Inhalation	Ingestion	Skin	Inhalation	Skin	Inhalation	Ingestion	Skin	Inhalation
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	50 mg/m3	n.a.	n.a.	10 mg/m3

Predicted no-effect concentration

Section	PNEC	Observations
Fresh Water	260 mg/l	-
Sea Water	26 mg/l	-
Intermittent discharges	183 mg/l	-
Sewage treatment plant (STP)	20000 mg/l	-
Freshwater sediment	572 mg/kg dry weight	-
Marine sediment	57.2 mg/kg dry weight	-
Soil	50 mg/kg dry weight	-

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8.1 Exposure controls

8.1.1. Appropriate engineering controls

Use local ventilation or other mechanical controls to maintain atmospheric levels below the exposure limit as required or instructed. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local ventilation may be necessary for some operations.

Personal protective equipment

Eye and face protection

Use safety glasses with side shields. Safety glasses with side shields should comply with EN 166 or an equivalent standard. If there is a possibility of exposure to particles, which may cause eye irritation, special safety glasses should be worn. Safety glasses should comply with EN 166 or equivalent.

Skin protection

Hand protection

No protective gloves are required when handling this material. According to the general rules of hygiene, which apply to any material, contact with the skin must be kept to a minimum.

Other skin protection:

No other protection is needed other than full body clean clothing.

Respiration protection:

Respiratory protection is necessary when there is a possibility of exceeding the exposure limit according to the requirements or instructions. If there are no exposure limit requirements or guidelines in force, wear respiratory protection if adverse effects such as respiratory irritation or discomfort are observed or when indicated by the local risk assessment process. In a foggy atmosphere use an approved fog (suspended droplets) air purifying mask.

Use the following CE-approved air-purifying respirator: Cylindrical organic vapor canister with particulate prefilter, type AP2

Environmental exposure controls:

See SECTION 7: "Handling and storage" and Section 13: "Disposal of the substance/preparation" on measures to avoid extreme environmental exposure during use and waste disposal.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Physical state:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	No data.
Melting point/ melting range:	< -20°C EC Method A1
Freezing point:	< -20°C EC Method A1
Boiling point (760 mmHg)	184°C at 752.46 mmHg EC Method A2
Ignition point:	closed cup 104 °C at 1000.1 hPa Method EC A9 (PMCC)
Flammability (solid, gas)	Not applicable to liquids
Lower explosion limit	2.6%(V) Estimated
Upper explosion limit	12.5%(V) Estimated
Vapour pressure:	20 Pa at 25°C EC Method A4
Relative vapor density (air = 1)	2.62 Bibliography
Relative density (water = 1)	1.03 at 20°C / 20°C EC Method A3
Water solubility:	100% at 20°C EC Method A6
Partition coefficient n-octanol/water	log Pow: -1.07 measured
Auto-ignition temperature:	> 400°C at 100.01 kPa EC Method A15
Decomposition temperature:	No data.
Dynamic viscosity:	43.4 mPa.s at 25 °C Bibliography
Kinematic viscosity:	No data.
Explosive properties:	Non-explosive
Oxidizing properties:	No

9.2.2 Other information

Density of liquid	1.03 g/cm ³ at 20 °C Bibliography
Molecular weight	No available data
Volatility in pour point percentages	< -57 °C Bibliography

ATTENTION: The physical figures mentioned above are typical values and should not be taken as determination.

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SECTION 10: Stability and reactivity

10.1 Reactivity	No available data.
10.2 Chemical stability	Stable under recommended storage conditions. See Section 7.
10.3 Possibility of hazardous reactions	It won't happen.
10.4 Conditions to avoid	No available data.
10.5 Incompatible materials	Avoid contact with: Strong acids. Strong bases. Strong oxidizing substances.
10.6 Hazardous decomposition products	Hazardous decomposition products depend on temperature, air supply and the presence of other materials. Decomposition products may include Aldehydes, Alcohols, Ethers, Organic acids.

SECTION 11: Toxicological information

Toxicological information appears in this section when such data are available.

11.1 Information on toxicological effects

Acute toxicity:

Acute oral toxicity:

Toxicity is considered very low at a single oral dose. No hazards are anticipated from ingestion of small amounts under normal handling operations.

LD50, Rat, > 20 000 mg/kg

Acute dermal toxicity:

A single prolonged exposure is unlikely to result in the absorption of harmful amounts of the substance through the skin.

LD50, Rabbit, > 2 000 mg/kg. No deaths occurred at this concentration.

Acute inhalation toxicity:

At room temperature vapours are minimal due to physical properties. The mist may cause irritation of the upper respiratory tract.

LC50, Rabbit, 2 h, dust/mist, 317.042 mg/l. No deaths occurred at this concentration.

Skin corrosion/irritation: Prolonged contact is essentially non-irritating to the skin.

Repeated exposures may cause peeling and thinning of the skin.

Serious eye damage/irritation: May cause slight transient (temporary) eye irritation. Corneal damage is unlikely. Mist may cause eye irritation.

Sensitization: It did not cause allergic skin reactions when tested on humans.

For respiratory sensitization: No relevant data have been found.

STOT-single exposure: Evaluation of available data indicates that this material is not a STOT-SE toxic substance.

STOT-repeated exposure: In rare cases, repeated overexposure to propylene glycol can cause central nervous system effects.

Carcinogenicity: It did not cause cancer in laboratory animals.

Teratogenesis: It did not cause birth defects or other fetal effects in laboratory animals.

Reproductive toxicity: Animal studies have shown that it does not interfere with reproduction. In animal studies, no interaction with fertility was observed.

Mutagenicity: In vitro genetic toxicity studies were negative. The results of mutagenicity tests in animals were negative.

Aspiration hazard: Based on the physical properties, it is not expected to be an aspiration hazard.

SECTION 12: Ecological information

Ecotoxicological information appears in this section when such data are available.

12.1 Toxicity

Acute toxicity to fish

Material not classified as dangerous for aquatic organisms (in the most sensitive organisms the LC50/EC50/IC50 levels are greater than 100mg/l).

LC50, Oncorhynchus mykiss (Rainbow trout), static test, 96 h, 40 613 mg/l, OECD Test Guideline 203

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Acute toxicity to aquatic invertebrates: LC50, Ceriodaphnia dubia (water flea), static test, 48 h, 18 340 mg/l, OECD TG 202

Acute toxicity to algae/aquatic plants: ErC50, Pseudokirchneriella subcapitata (green algae), 96 h, Growth inhibition, 19 000 mg/l, OECD TG 201

Toxicity to bacteria: NOEC, Pseudomonas putida, 18 h, > 20 000 mg/l, Method not named.

Long-term toxicity to aquatic invertebrates: NOEC, Ceriodaphnia dubia (daphnia), semi-static test, 7 d, number of offspring, 13 020 mg/l

12.2 Persistence and degradability

Biodegradability: The substance is readily biodegradable. It successfully passes the OECD test for easy biodegradation. Biodegradation can take place slowly under anaerobic conditions (in the absence of oxygen).

10-day interval: success

Biodegradation: 81%

Exposure time: 28 d

Method: OECD Test Guideline 301F or equivalent

10-day interval: not applicable

Biodegradation: 96 %

Exposure time: 64 d

Method: OECD Test Guideline 306 or equivalent

12.3 Bio-accumulative potential

Bioaccumulation: The potential for bioconcentration is limited (bioconcentration factor BCF<100 or log Pow<3).

Partition Coefficient: n-octanol/water (log Pow): -1.07 Measured

Bioconcentration (BCF): 0.09 Estimated.

12.4 Mobility in soil

Since Henry's constant is very small, evaporation from natural water concentrations or moist soil is not expected to be a significant destructive process.

The potential for mobility in soil is particularly high (Koc between 0 and 50).

Partition Coefficient (Koc): < 1 Est.

12.5 Results of PBT and vPvB assessment

This substance is not considered persistent, bio-accumulative, and toxic (PBT). This substance is not considered to be very persistent and very bio-accumulative (vPvB).

12.6 Endocrine disrupting properties

None of the ingredients ($\geq 0.1\%$) is considered to have endocrine-disrupting properties with respect to non-target organisms, as none of them meet the criteria set out in section B of Regulation (EU) No 2017/2100.

12.7 Other adverse effects

This substance is not included in the list of substances of the Montreal Protocol, which destroy the ozone layer.

SECTION 13: Disposal considerations

13.1 Waste management methods

Disposal actions should comply with all national and international laws and regulations. Do not discharge into drains, soil, or any water body.

The final classification of the material in the appropriate European Waste Catalog (EWC) group and therefore the correct EWC code for the material will depend on the use of the material. Contact the competent waste disposal services.

SECTION 14: Transport information

14.1 Classification for ROAD and RAIL transport (ADR/RID):

14.1.1 UN Number	Not applicable.
14.1.2 Proper name of UN mission	There are no regulations.
14.1.3 Transport hazard class(es).	Not applicable.
14.1.4 Packing group	Not applicable.
14.1.5 Environmental Hazards	It is not considered to be hazardous to the environment based on available data.
14.1.6 Special precautions for the user	No data available.

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14.2 Characterization for SEA transport (IMO-IMDG):

14.2.1 UN Number	Not applicable.
14.2.2 Proper name of UN mission	Not regulated for transport.
14.2.3 Transport hazard class(es)	Not applicable.
14.2.4 Packing group	Not applicable.
14.2.5 Environmental Hazards	Not considered a marine pollutant based on available data.
14.2.6 Special precautions for the user	No available data.
14.2.7 Transport in bulk according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code	Consult IMO regulations before transporting ocean bulk.

14.3 Designation for AIR transport (IATA/ICAO):

14.1 UN Number	Not applicable.
14.2 Proper name of UN mission	Not regulated for transport.
14.3 Transport hazard class(es).	Not applicable.
14.4 Packing group	Not applicable.
14.5 Environmental Hazards	Not applicable.
14.6 Special precautions for the user	No available data.

This information is not intended to convey all specific regulatory or operational requirements / information regarding this product. Shipping classifications may vary by container volume and may be affected by local or state variations in regulations. Additional transmission system information can be provided through an authorized sales representative or customer service representative. It is the responsibility of the shipping company to comply with all applicable laws, regulations and rules regarding the transportation of the material.

SECTION 15: Regulatory information

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) no. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals ("REACH")

This product has been registered, according to regulation (EC) no. 1907/2006 (Registration, Evaluation, Authorization and Restriction of Chemicals or REACH)., The above indicative categories in relation to the classification status of a chemical product under the REACH Regulation are provided "in good faith" and were considered accurate as of the above effective date. However, no express or implied warranty is provided. It is the buyer/user's responsibility to ensure that they have a correct understanding of the regulatory status of the particular product.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the management of major-accident hazards involving dangerous substances. Referred to in the regulation: Not applicable

15.2 Chemical safety assessment

A Material Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

16.1 Indication of changes: None.

16.2 Abbreviations and acronyms:

TWA: 8-hr TWA.

US WEEL: USA. Workplace Environmental Exposure Levels (WEEL).

16.3 Key literature references and sources for data:

This SDS is prepared by Product Regulatory Services and Risk Communication Teams based on information obtained from internal reference sources within our company.

16.7 Further information:

All customers or recipients of this (M)SDS are advised to study it carefully and consult an expert, if necessary, to be informed and understand the data contained in this (M)SDS, as well as the potential hazards associated with the product. The information herein is provided in good faith and is believed to be accurate as of the above-mentioned current date. However, no express or implied warranty is provided. Regulatory specifications are subject to change and may vary by location. It is the buyer/user's responsibility to ensure that their activities comply with all federal, state, provincial or local laws. The information listed here is for the product as it was shipped. Since the conditions of use of the product are beyond the control of the manufacturer, it is the duty of the purchaser/user to determine the necessary conditions of safe use of the product. Due to the large number of sources of information, such as the (M)SDS provided by the manufacturer, we are not and cannot be responsible for the (M)SDS you obtained from another source. If you have obtained an (M)SDS from another source or are unsure that the (M)SDS is current, please contact us for a more recent version.