

SAFETY DATA SHEET



Product name: DP-LUBRICANT BLUE
Revision Date: 2018-11-27
Document No.: M0015

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SDS-ID: CA-EN/22.0

1. IDENTIFICATION

Product identifier

Product name: DP-LUBRICANT BLUE
Cat. No. 40700005, 40700006, 40700056

Container size: 1 l, 5 l, 10 l

Recommended use and restrictions on use

Application: Cooling and lubricating agent for grinding and polishing of metallographic specimens.

Details of the supplier of the safety data sheet

Supplier: Struers Ltd
7275 West Credit Avenue
Ontario L5N 5M9 Mississauga
Canada
Tel: +1 (905) 8148855

Responsible for safety data sheet authoring: Responsible for safety data sheet authoring: DHI
Any questions to the contents of this safety data sheet should be sent to:
struers@struers.dk

Emergency telephone number

Alberta & NWT:
Poison & Drug Information Service (PADIS): 1-800-332-1414
British Columbia:
Drug and Poison Information Centre (DPIC): 604-682-5050 / 1-800-567-8911
Ontario:
Poison Centre: 1-800-268-9017
Québec:
Poison Control Centre: 1-800-463-5060

Infotrac:
1-800-535-5053
Struers CAN:
+1 (905) 8148855
(Only during office hours)

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2. HAZARDS IDENTIFICATION

Classification of the hazardous product

WHMIS 2015: Flammable Liquids — Category 2
Eye Irritation — Category 2
Specific Target Organ Toxicity — Repeated Exposure — Category 2

Label elements



Danger

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H373K	May cause damage to organs (kidneys) through prolonged or repeated exposure.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves, eye and face protection.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local regulations.
P233	Keep container tightly closed.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges.
P264	Wash contaminated skin thoroughly after handling.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P370 + P378	In case of fire: Use alcohol resistant foam, carbon dioxide or dry powder to extinguish.
P403 + P235	Store in a well-ventilated place. Keep cool.

Other hazards

PBT/vPvB: Not Classified as PBT/vPvB by current EU criteria.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

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The product contains: organic solvents and pigments .

WHMIS 2015:

%:	CAS-No.:	EC No.:	REACH Reg. No:	Chemical name:	Hazard classification:	Notes:
70-85	64-17-5	200-578-6	01-2119457610-43-xxxx	Ethanol	Flammable Liquids Category 2 Eye Irritation Category 2	
10-15	107-21-1	203-473-3	01-2119456816-28-xxxx	Ethanediol	Acute (Oral) Toxicity Category 4 Category 2 Target organ toxicant, Repeated ExposureK	
5-<10	67-63-0	200-661-7	01-2119457558-25-xxxx	Propan-2-ol	Flammable Liquids Category 2 Eye Irritation Category 2 Specific Target Organ Toxicity Single Exposure Category 3	
<1	94277-77-7	304-661-9	-	Blue dye	Aquatic Chronic Toxicity Category 3	

4. FIRST-AID MEASURES

Description of first-aid measures

Burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital.

Inhalation: Move injured person into fresh air and keep person calm under observation. If uncomfortable: Seek hospital and take along these instructions.

Skin contact: Remove contaminated clothes and rinse skin thoroughly with water.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Continue flushing during transport to hospital. Bring along these instructions.

Ingestion: Immediately rinse mouth and drink plenty of water. Keep person under observation. If person becomes uncomfortable seek hospital and bring these instructions.

Most important symptoms and effects, both acute and delayed

Symptoms/effects: See section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Treat symptomatically.

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5. FIRE-FIGHTING MEASURES

Extinguishing media

Extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the hazardous product

Specific hazards: The product is highly flammable, and explosive vapors/air mixtures may be formed even at normal room temperatures. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Vapors may be ignited by a spark, a hot surface or an ember.

Advice for fire-fighters

Protective equipment for fire-fighters: Use air-supplied respirator during fire fighting.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Protective equipment: Do not smoke or use open fire, or other sources of ignition. Do not breathe vapor. Avoid contact with skin and eyes. For personal protection, see section 8. (*)

Emergency procedures: No specific recommendations. For personal protection, see section 8. (*)

Environmental precautions

Environmental precautions: Do not discharge into drains, water courses or onto the ground.

Methods and material for containment and cleaning up

Spill Cleanup Methods: Large quantities of concentrate should not be discharged into the drain but removed with absorbing material. Do not use sawdust or other combustible material.

Reference to other items

References: For personal protection, see section 8. For waste disposal, see section 13.

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7. HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Do not breathe vapor. Avoid contact with skin and eyes. Observe good chemical hygiene practices.

Technical measures: Do not smoke or use open fire or other sources of ignition.

Technical precautions: Local exhaust is recommended.

Conditions for safe storage, including any incompatibilities

Technical measures for safe storage: Follow rules for flammable liquids.

Storage conditions: Store in a cool and well-ventilated place. Avoid contact with oxidizing agents.

Specific end-use(s)

Specific use(s): No information available.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Other provincial OEL's may apply.

Occupational exposure limits:

<u>CAS-No.:</u>	<u>Chemical name:</u>	<u>As:</u>	<u>Exposure limits:</u>		<u>Type:</u>	<u>Notes:</u>	<u>References:</u>
64-17-5	Ethyl alcohol	-	1000 ppm	1880 mg/m3	TWA	-	Alberta
64-17-5	Ethanol	-	1000 ppm		STEL	-	BC
64-17-5	Ethyl alcohol	-	1000 ppm	1880 mg/m3	TWA	-	Quebec
67-63-0	Isopropyl alcohol	-	400 ppm	985 mg/m3	TWA	-	Quebec
		-	500 ppm	1230 mg/m3	STEL	15min	
67-63-0	Isopropyl alcohol	-	200 ppm	492 mg/m3	TWA	-	Alberta
		-	400 ppm	984 mg/m3	STEL	15min	
67-63-0	Isopropanol	-	200 ppm		TWA	-	BC
		-	400 ppm		STEL	-	
107-21-1	Ethylene glycol	-		100 mg/m3	C	3	Alberta

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors.

Personal protection: Personal protection equipment should be chosen according to relevant standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation and work of brief duration, use suitable respiratory equipment. Use respiratory equipment with gas filter, type A2.

Hand protection: Wear protective gloves. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Eye protection: Wear goggles/face shield.

Skin protection: Wear apron or protective clothing in case of contact.

Environmental Exposure Controls: Not available.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

(*)

<u>Form:</u>	Liquid.
<u>Colour:</u>	Blue
<u>Odour:</u>	odour of alcohol
<u>Odour threshold:</u>	Not available.
<u>pH:</u>	Not available.
<u>Melting point:</u>	Not available.
<u>Boiling point:</u>	85°C
<u>Flash point:</u>	12°C
<u>Evaporation rate:</u>	Not available.
<u>Flammability (solid, gas):</u>	Not available.
<u>Explosion limits:</u>	2-12%
<u>Vapour pressure:</u>	Not available.
<u>Vapour density:</u>	Not available.
<u>Relative density:</u>	0.82
<u>Solubility:</u>	Miscible with water.
<u>Partition coefficient (n-octanol/water):</u>	Not available.
<u>Auto-ignition temperature (°C):</u>	Not available.
<u>Decomposition temperature (°C):</u>	Not available.
<u>Viscosity:</u>	Not available.
<u>Explosive properties:</u>	Not available.
<u>Oxidising properties:</u>	Not available.

Other information

Other data: Volatile Organic Compound (VOC): 812 g/l (calculated)

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10. STABILITY AND REACTIVITY

Reactivity

Reactivity: No data available.

Chemical stability

Stability: Stable under normal temperature conditions.

Possibility of hazardous reactions

Hazardous Reactions: No data available.

Conditions to avoid

Conditions/materials to avoid: Direct sunlight. Keep away from heat, sparks and open flame.

Incompatible materials

Incompatible materials: Oxidizing agents.

Hazardous decomposition products

Hazardous decomposition products: No information available.

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute Toxicity (Oral): Based on available data, the classification criteria are not met.

Acute Toxicity (Dermal): Based on available data, the classification criteria are not met.

Acute Toxicity (Inhalation): Based on available data, the classification criteria are not met.

Skin Corrosion/Irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Causes serious eye irritation.

Respiratory or skin sensitization: Based on available data, the classification criteria are not met.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.
National Toxicology Program (NTP): No.
IARC Cancer Review: Group 3 for 2-Propanol.

Reproductive Toxicity: Based on available data, the classification criteria are not met.

STOT - Single exposure: Based on available data, the classification criteria are not met.

STOT - Repeated exposure: May cause damage to organs (kidneys) through prolonged or repeated exposure.

Aspiration hazard: Based on available data, the classification criteria are not met.

Inhalation: Small quantities: Vapors may irritate throat and respiratory system and cause coughing.
Large quantities: Vapors may irritate throat and respiratory system and cause headache, dizziness and dullness. In serious cases, unconsciousness and permanent damage to the nervous system, including the brain, and liver may be seen. Frequent inhalation of even small concentrations may cause irritability, fatigue, memory failure and in time permanent damage to the nervous system, including the brain, and possibly kidneys, too.

Skin contact: Prolonged contact may cause redness, irritation and dry skin. Contains 2-propanol which may penetrate the skin.

Ingestion: May cause intoxication, headache, dizziness, stomach pains, convulsions, and in serious cases, unconsciousness, acute kidney failure, breathing and heart failure. Lethal dose for an adult person: approx. 50-100 ml (ethanediol).

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12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity: The product is not expected to be hazardous to the environment.

Persistence and degradability

Degradability: The product is biodegradable. BOD₂₀ > 78%

Bioaccumulative potential

Bioaccumulative potential: The product is not bio-accumulating.

Mobility in soil

Mobility: No data available.

Results of PBT and vPvB assessment

PBT/vPvB: This product does not contain any PBT or vPvB substances.

Other adverse effects

Other adverse effects: None known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

Contaminated packaging: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.

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14. TRANSPORT INFORMATION

The product is covered by international regulation on the transport of dangerous goods (IMDG, IATA).

UN number

UN-No: 1993

UN proper shipping name

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S (Ethanol, Isopropylalcohol Mixture)

Additional IMDG information:

EmS: F-E , S-E

MFAG: 1

Transport hazard class(es)

Class: 3

Packing group

PG: II

Environmental hazards

Marine pollutant: No.

Environmentally Hazardous substance: No.

Special precautions for user

Special precautions: None known.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Transport in bulk: Not relevant

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15. REGULATORY INFORMATION

Safety, health and environmental regulations specific to the product

Special provisions: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

DSL: All chemicals included in the product are DSL listed or exempt.

National regulation: Hazardous Products Regulations, with amendments.
Alberta: Occupational Health and Safety Code 2009.
British Columbia: Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, with amendments (2015).
Quebec: Regulation respecting the quality of the work environment, with amendments (2013-12-13).
Ontario: Control of Exposure to Biological or Chemical Agents R.R.O. 1990, Reg. 833, with amendments (2016).
Canadian Environmental Protection Act, Reporting for the Domestic Substances List (DSL), with amendments.
U.S. Department of health and human services: 2011 - Report on Carcinogens - 12th Edition.
International Agency for Research on Cancer (IARC): IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Lyon: IARC, World Health Organization.

16. OTHER INFORMATION

The user must be instructed in the proper work procedure and be familiar with the contents of these instructions.

The following sections contain revisions or new statements: 6, 9.

The (*) indicates the changes made with respect to the previous version.

Approved by DHI.



Additional information: Classification according to WHMIS 2015:
Calculation method.

The information on this data sheet represents our current data and is reliable provided that the product is used under the prescribed conditions and in accordance with the application specified on the packaging and/or in the technical guidance literature. Any other use of the product which involves using the product in combination with any other product or any other process is the responsibility of the user.

Made by DHI - Environment and Toxicology, Agern Allé 5, DK-2970 Hørsholm, Denmark.
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