SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: DP-SUSPENSION A
Cat. No. 40600347, 40600348, 40600349, 40600350, 40600351, 40600352
Container size: 500 ml

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

Application: Cutting and cooling additive for materialographic preparations

1.3. Details of the supplier of the safety data sheet

Supplier: Struers A/S
Pederstrupvej 84
DK-2750 Ballerup
Tel:+45 44 600 800

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

1.4. Emergency telephone number

Emergency telephone: +45 44 600 800
(Only during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

The product is classified: F;R11

Physical and Chemical Hazards: The product is highly flammable, and explosive vapours/air mixtures may be formed even at normal room temperatures.

Human health: Organic solvents may be absorbed into the body by inhalation and ingestion and cause permanent damage to the nervous system, including the brain. Degreasing to skin. The liquid may irritate the skin, the eyes and the respiratory tract.

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

2.2. Label elements

R11 Highly flammable.
S16 Keep away from sources of ignition - No smoking.
S51 Use only in well-ventilated areas.
S60 This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

PBT/vPvB: Not relevant.
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

The product contains: organic solvents and additives.

67/548/EEC:

<table>
<thead>
<tr>
<th>%</th>
<th>CAS-No.</th>
<th>EC No.</th>
<th>REACH Reg. No:</th>
<th>Chemical name</th>
<th>Hazard classification</th>
<th>Notes</th>
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<td>50-90</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>-</td>
<td>Ethanol</td>
<td>F;R11</td>
<td></td>
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<tr>
<td>5-&lt;10</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>-</td>
<td>Propan-2-ol</td>
<td>F;R11 Xi;R36 R67</td>
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<tr>
<td>&lt;0.5</td>
<td>7782-40-3</td>
<td>231-953-2</td>
<td>-</td>
<td>Diamond</td>
<td>-</td>
<td></td>
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</table>

GHS/CLP:

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<th>%</th>
<th>CAS-No.</th>
<th>EC No.</th>
<th>REACH Reg. No:</th>
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</thead>
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<tr>
<td>50-90</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>-</td>
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<td>Flam. Liq. 2;H225</td>
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<td>Propan-2-ol</td>
<td>Flam. Liq. 2;H225</td>
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<tr>
<td>&lt;0.5</td>
<td>7782-40-3</td>
<td>231-953-2</td>
<td>-</td>
<td>Diamond</td>
<td>Eye Irrit. 2;H319 STOT SE 3;H336</td>
<td></td>
</tr>
</tbody>
</table>

References: The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. 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 into fresh air and keep at rest.

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

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

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

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

4.3. Indication of any immediate medical attention and special treatment needed

Medical attention/treatments: Not known.
SAFETY DATA SHEET

SECTION 5: FIREFIGHTING MEASURES

5.1. 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.

5.2. Special hazards arising from the substance or mixture

Specific hazards: The product is flammable. Vapours may be ignited by a spark, a hot surface or an ember. Vapours may form explosive air mixtures even at room temperature.

5.3. Advice for firefighters

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Do not smoke, use open fire or other sources of ignition. Avoid inhalation of vapours and contact with skin and eyes.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

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

6.4. Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Avoid inhalation of vapours and contact with skin and eyes. Observe good chemical hygiene practices. Take precautionary measures against static discharges.

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

Technical precautions: Local exhaust is recommended.

7.2. Conditions for safe storage, including any incompatibilities


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

7.3. Specific end use(s)

Specific use(s): Not relevant.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Occupational exposure limits:

<table>
<thead>
<tr>
<th>CAS-No.</th>
<th>Chemical name</th>
<th>As</th>
<th>Exposure limits</th>
<th>Type</th>
<th>Notes</th>
<th>References</th>
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</thead>
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<td>-</td>
<td>1000 ppm</td>
<td>1920 mg/m3</td>
<td>TWA</td>
<td>-</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Propan-2-ol</td>
<td>-</td>
<td>400 ppm</td>
<td>999 mg/m3</td>
<td>TWA</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>500 ppm</td>
<td>1250 mg/m3</td>
<td>STEL</td>
<td>15min</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

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

Personal protection: Personal protection equipment should be chosen according to the CEN 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. Risk of contact: Butyl rubber 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: Risk of contact: Wear goggles/face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance: Black/grey liquid

Odour: Odour of alcohol

pH: Not relevant.

Boiling point: Not available.

Flash point: 12°C

Explosion limits: Not available.

Relative density: 0.85

Solubility: Miscible with water.

9.2. Other information

Other data: VOC (Volatile Organic Substances): 764 g/l (calculated)
SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity
Reactivity: None known.

10.2. Chemical stability
Stability: Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions
Hazardous Reactions: None known.

10.4. Conditions to avoid

10.5. Incompatible materials
Incompatible materials: None known.

10.6. Hazardous decomposition products
Hazardous decomposition products: None in particular.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects
In case of insufficient ventilation, extensive use may cause the damage described below.

Inhalation: Small quantities: Vapours may irritate throat and respiratory system and cause coughing. Large quantities: Vapours may irritate throat and respiratory system and cause headache, dizziness and dullness. Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication. In serious cases, unconsciousness and permanent damage to the nervous system, including the brain, and liver may be seen.

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

Eye contact: Splashes may irritate.

Ingestion: May irritate and cause malaise.

Specific effects: 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.
SECTION 12: ECOLOGICAL INFORMATION

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

12.2. Persistence and degradability
Degradability: The product is 80% biodegradable.

12.3. Bioaccumulative potential
Bioaccumulative potential: No data available on bioaccumulation.

12.4. Mobility in soil
Mobility: The product is miscible with water. May spread in water systems. The product contains organic solvents which will evaporate easily from all surfaces. No data available.

12.5. Results of PBT and vPvB assessment
PBT/vPvB: Not relevant.

12.6. Other adverse effects
Other adverse effects: None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Dispose of waste and residues in accordance with local authority requirements. Waste is classified as hazardous waste.

Waste from residues: EWC-code: 16 05 08
SECTION 14: TRANSPORT INFORMATION

14.1. UN number
UN-No: 1993

14.2. UN proper shipping name
Proper Shipping Name: FLAMMABLE LIQUID, N.O.S (Mixture of Ethanol solution)

Additional IMDG information:
EmS: F-E , S-E
MFAG: 1

14.3. Transport hazard class(es)
Class: 3

14.4. Packing group
PG: II

14.5. Environmental hazards
Marine pollutant: No.
Environmentally Hazardous substance: No.

14.6. Special precautions for user
Special precautions: None known.

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

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.

15.2. Chemical Safety Assessment
CSA status: Not relevant.
SECTION 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: 1, 3.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Wording of R-phrases/H-statements:
R11   Highly flammable.
R36   Irritating to eyes.
R67   Vapours may cause drowsiness and dizziness.
H225  Highly flammable liquid and vapour.
H319  Causes serious eye irritation.
H336  May cause drowsiness or dizziness.

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.