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

Product identifier

Product name: DP-SPRAY
Cat. No. 40600144, 40600145, 40600146, 40600147, 40600148, 40600149,
40600150, 40600151, 40600152, 40600153, 40600154, 40600155

Container size: 150 ml

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

Application: For grinding and polishing for materialographic preparations
Uses advised against: No specific uses advised against are identified. (*)

Details of the supplier of the safety data sheet

Supplier: Struers Australia
27 Mayneview Street
Milton QLD 4064, Australia

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


+61 7 3512 9600
(Only during office hours)
SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

WHS:        Flammable aerosol - Category 1
            Serious eye damage/eye irritation - Category 2

Label elements

Danger

H222       Extremely flammable aerosol.
H229       Pressurised container: May burst if heated.
H319       Causes serious eye irritation.
P210       Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211       Do not spray on an open flame or other ignition source.
P251       Pressurized container: Do not pierce or burn, even after use.
P410 + P412  Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P305 + P351 + P338  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other hazards

The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged contact may cause redness and irritation. Spray mists may cause respiratory tract irritation.

PBT/vPvB:  No information available.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures

The product contains: organic solvents, abrasive and propellants.

WHS:

<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>
</tr>
</thead>
<tbody>
<tr>
<td>60-90</td>
<td>64-17-5</td>
<td>200-578-6</td>
<td>01-2119457610-43-xxxx</td>
<td>Ethanol</td>
<td>Flam. Liq. 2;H225</td>
<td>Eye Irrit. 2;H319</td>
</tr>
<tr>
<td>5-&lt;10</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>01-2119457558-25-xxxx</td>
<td>Propan-2-ol</td>
<td>Flam. Liq. 2;H225</td>
<td>Eye Irrit. 2;H319 STOT SE 3;H336</td>
</tr>
<tr>
<td>1-5</td>
<td>7727-37-9</td>
<td>231-783-9</td>
<td>-</td>
<td>Nitrogen</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>&lt;3</td>
<td>7782-40-3</td>
<td>231-953-2</td>
<td>-</td>
<td>Diamond</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

References: The full text for all hazard statements is displayed in section 16.


**SECTION 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 bring 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. Do not induce vomiting.

**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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**SECTION 5: FIREFIGHTING 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.

**Special hazards arising from the substance or mixture**

**Specific hazards:** The product is extremely flammable, and explosive vapour/air mixtures may be formed even at normal room temperatures. Aerosol containers can explode when heated, due to excessive pressure build-up.

**Advice for firefighters**

**Protective equipment for fire-fighters:** Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
Do not smoke or use open fire, or other sources of ignition. Avoid inhalation of vapours and aerosols and contact with skin and eyes. For personal protection, see section 8.

For emergency responders:
No specific recommendations. For personal protection, see section 8.

Environmental precautions

Environmental precautions:
Avoid discharge into water courses or onto the ground.

Methods and material for containment and cleaning up

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

Reference to other sections

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

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice:
Avoid inhalation of vapours and 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:
Mechanical ventilation may be required.

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 oxidising agents.

Specific end use(s)

Specific use(s):
No information available.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>Isopropyl alcohol</td>
<td>-</td>
<td>400 ppm</td>
<td>983 mg/m³</td>
<td>TWA</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>500 ppm</td>
<td>1230 mg/m³</td>
<td>STEL</td>
<td>15min</td>
</tr>
<tr>
<td>7727-37-9</td>
<td>Nitrogen</td>
<td>-</td>
<td>-</td>
<td>Asphyxiant</td>
<td>WES</td>
<td></td>
</tr>
<tr>
<td>64-17-5</td>
<td>Ethyl alcohol</td>
<td>-</td>
<td>1000 ppm</td>
<td>1880 mg/m³</td>
<td>TWA</td>
<td>-</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours and spray mist. Provide easy access to water supply or an emergency shower.

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

Respiratory equipment: In case of inadequate ventilation: Use respiratory equipment with combination filter, type A2/P2. (*)

Hand protection: Risk of contact: Wear protective gloves. Nitrile gloves are recommended. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Breakthrough time: 240 min Thickness: 0,5 mm (*)

Eye protection: Risk of splashes: Wear face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.
**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>Aerosol</td>
</tr>
<tr>
<td>Odour</td>
<td>Odour of alcohol</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash point</td>
<td>13°C (liquid phase)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>3.3-19 vol%</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Miscible with water</td>
</tr>
<tr>
<td>Partition coefficient (n-octanol/water)</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Decomposition temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**Other information**

**Other data:** Volatile Organic Compound (VOC): 700 g/l (calculated)
SECTION 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: Avoid exposing aerosol containers to high temperatures or direct sunlight.

Incompatible materials
Incompatible materials: Avoid contact with oxidising agents.

Hazardous decomposition products
Hazardous decomposition products: No data available.

SECTION 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 sensitisation: 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: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Inhalation: Vapours and spray mist may irritate throat and respiratory system and cause coughing. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Skin contact: Prolonged contact may cause redness and irritation.
Ingestion: May irritate and cause malaise.
Specific effects: Frequent inhalation of even small concentrations may cause irritability, fatigue and memory failure and eventually permanent damage to the nervous system, including the brain.
SECTION 12: ECOLOGICAL INFORMATION

**Toxicity**

Ecotoxicity: The environmental hazard of the product is considered to be limited.

**Persistence and degradability**

Degradability: The product is easily biodegradable.

**Bioaccumulative potential**

Bioaccumulative potential: No data available on bioaccumulation.

**Mobility in soil**

Mobility: No data available.

**Results of PBT and vPvB assessment**

PBT/vPvB: No information available.

**Other adverse effects**

Other adverse effects: No information available.

SECTION 13: DISPOSAL CONSIDERATIONS

**Waste treatment methods**

Waste from residues: Dispose of waste and residues in accordance with local authority requirements. Do not puncture or incinerate even when empty.

Contaminated packaging: Dispose of waste and residues in accordance with local authority requirements. Empty aerosol containers before disposal.
SECTION 14: TRANSPORT INFORMATION

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

**UN number**

UN-No: 1950

**UN proper shipping name**

Proper Shipping Name: AEROSOLS

Additional IMDG information:
EmS: F-D, S-U
MFAG: 1

**Transport hazard class(es)**

Class: 2.1

**Packing group**

PG: -

**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.

SECTION 15: REGULATORY INFORMATION

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

**Special provisions:**
AICS: Listed.

**National regulation:**
Work Health and Safety Regulations 2011, with amendments.
The Industrial Chemicals (Notification and Assessment) Act 1989, as amended.
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, 8.
The (*) indicates the changes made with respect to the previous version.

Approved by DHI.

Abbreviations and acronyms used in the safety data sheet:
PBT = Persistent, Bioaccumulative and Toxic.
vPvB = very Persistent and very Bioaccumulative.

Additional information: Classification according to WHS Regulations 2011:
Calculation method.

Wording of H-statements:

<table>
<thead>
<tr>
<th>H222</th>
<th>Extremely flammable aerosol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H229</td>
<td>Pressurised container: May burst if heated.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>H336</td>
<td>May cause drowsiness or dizziness.</td>
</tr>
</tbody>
</table>

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 Heresholm, Denmark.