1. IDENTIFICATION

Product identifier

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

Container size: 150 ml

Recommended use and restrictions on use

Application: For grinding and polishing for materialographic preparations

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: 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)
2. HAZARDS IDENTIFICATION

Classification of the hazardous product

WHMIS 2015:
- Flammable Aerosols — Category 1
- 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, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 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 vapor/air mixtures may be formed even at normal room temperatures. Vapors 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixtures
The product contains: organic solvents, abrasive and propellants.
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. 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.
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 extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. Aerosol containers can explode when heated, due to excessive pressure build-up.

Advice for fire-fighters

Protective equipment for fire-fighters: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

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. Avoid inhalation of vapors and aerosols and 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: 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 items

References: For personal protection, see section 8. For waste disposal, see section 13.
7. HANDLING AND STORAGE

Precautions for safe handling

Safe handling advice: Avoid inhalation of vapors 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


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.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Other provincial OEL’s may apply.

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>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>
<tr>
<td>64-17-5</td>
<td>Ethanol</td>
<td>-</td>
<td>1000 ppm</td>
<td>1880 mg/m³</td>
<td>STEL</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>
<tr>
<td>67-63-0</td>
<td>Isopropyl alcohol</td>
<td>-</td>
<td>400 ppm</td>
<td>985 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>67-63-0</td>
<td>Isopropyl alcohol</td>
<td>-</td>
<td>200 ppm</td>
<td>492 mg/m³</td>
<td>TWA</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>400 ppm</td>
<td>984 mg/m³</td>
<td>STEL</td>
<td>15min</td>
</tr>
<tr>
<td>67-63-0</td>
<td>Isopropanol</td>
<td>-</td>
<td>200 ppm</td>
<td>TWA</td>
<td>-</td>
<td>BC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>400 ppm</td>
<td>STEL</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>7727-37-9</td>
<td>Nitrogen</td>
<td>-</td>
<td>2</td>
<td></td>
<td></td>
<td>Alberta</td>
</tr>
<tr>
<td>7727-37-9</td>
<td>Nitrogen</td>
<td>-</td>
<td>Simple asphyxiant</td>
<td></td>
<td></td>
<td>BC</td>
</tr>
<tr>
<td>7727-37-9</td>
<td>Nitrogen</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td>Quebec</td>
</tr>
</tbody>
</table>

Exposure controls

Engineering measures: Provide adequate ventilation. Observe Occupational Exposure Limits and minimize 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 standards and in discussion with the supplier of the personal protective equipment.

Respiratory equipment: In case of inadequate ventilation: Use respiratory equipment with gas filter, type A2.

Hand protection: Risk of contact: 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: Risk of splashes: Wear face shield.

Skin protection: No special precautions.

Environmental Exposure Controls: Not available.
### 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) |
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 oxidizing agents.

**Hazardous decomposition products**
Hazardous decomposition products: No data available.

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

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

**Inhalation:** Vapors and spray mist may irritate throat and respiratory system and cause coughing. Vapors 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.
12. ECOLOGICAL INFORMATION

**Ecotoxicity**

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.

13. DISPOSAL CONSIDERATIONS

**Waste treatment methods**

Waste from residues: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Do not puncture or incinerate even when empty.

Contaminated packaging: Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations.
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
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.
- Canadian Environmental Protection Act, Reporting for the Domestic Substances List (DSL), with amendments.
- Ontario: Control of Exposure to Biological or Chemical Agents R.R.O. 1990, Reg. 833, with amendments (2016).
- Quebec: Regulation respecting the quality of the work environment, with amendments (2013-12-13).

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.