



HAGEN automation
DESKTOP ROBOTS
INDUSTRIAL ROBOTS
3D PRINTING



1. IDENTIFICATION

Material: Polydimethylsiloxane Silicone Oil with Tungsten Disulphide, Molybdenum Disulphide and Hex Boron Nitride additives

Supplier: Hagen Automation Ltd

Address:

Hagen Automation, Greybern House, Templars Way, Sharnbrook, MK441PY United Kingdom
Emergency Tel: 0044 7739 854 883

2. COMPOSITION

Polydimethylsiloxane CAS NUMBER 63148-62-9 90 - 95% $\pm 2\%$

Tungsten disulphide CAS NUMBER 12138-09-9 - 2% $\pm 2\%$

Molybdenum Disulphide CAS 1317-33-5 2% $\pm 2\%$

Hex Boron Nitride CAS 10043-11-5 2% $\pm 2\%$

Oil identification dye (red) <1%

Symptoms relating to use: Not classified as Hazardous

3. HAZARDS IDENTIFICATION

This product is not considered to be hazardous and does not contain any hazardous components. All components are chemically inert and highly stable.

4. FIRST AID MEASURES

Eye: Flush patient's eyes with water for 15 minutes, while holding the eyelids apart. Remove contact lenses if present and easy to do so. Continue rinsing. Get medical attention if irritation persists.

Skin: None normally required. For excessive unintentional exposures, wash skin with soap and water.

Inhalation: Remove to fresh air. Get medical attention if irritation or symptoms occur.

Ingestion: If small quantities are swallowed, rinse out mouth with water. Do not induce vomiting unless directed to by a doctor or physician. Get medical attention for large ingestions.

5. FIRE FIGHTING MEASURES

5.1 Suitable Extinguishing Media:

Use water spray, fog or mist, alcohol foam, or dry chemicals to extinguish.

5.2 Special Hazards Arising from the Substance or Mixture:

Exposure to high temperatures may release flammable hydrocarbons that can accumulate in confined areas and present a fire or explosion hazard. Burning may release hydrocarbons, and oxides of carbon.

5.3 Advice for Fire-Fighters:

Firefighters should wear full emergency equipment and approved positive pressure self-contained breathing apparatus for all fires involving chemicals.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Keep unnecessary personnel away. Spilt product maybe slippery!

6.2 Environmental Precautions:

Do not flush into surface water or sanitary sewer system. Notify local authorities if product enters sewers or public waters.

6.3 Methods and Material for Containment and Cleaning up:

Stop spill at source if safe to do so. Contain spill and pump liquid into a suitable container or absorb with an inert absorbent and place in a suitable container.

6.4 Reference to Other Sections:

Refer to Section 8 for Personal Protective Equipment and Section 13 for Disposal information

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Keep away from heat, sparks and open flame. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash exposed skin thoroughly with soap and water after use. Wear appropriate personal protective equipment as specified in Section 8. Observe good industrial hygiene practices.

7.2 Conditions for Safe Storage, Including Any Incompatibilities:

Store in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from oxidizing agents and other incompatible materials. Keep away from open flames, sparks, and excessive heat.

Store in containers made of stainless steel, HDPE, PET, or glass.

7.3 Specific End Use(s):

Lubricant for use on o ring and other chains.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Direct contact with the skin should be avoided.

Specific Eye/face Protection: Chemical safety glasses recommended.

Specific Skin Protection: Protective gloves recommended if needed to avoid prolonged contact.

Wear protective clothing as necessary to avoid skin contact.

Specific Respiratory Protection: None under normal use conditions. For operations where exposure limits are exceeded, an approved respirator with an organic vapor cartridge and a dust/mist pre-filter or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration. Select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained breathing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state at 20°C Dark liquid

Colour None

Odour None

pH value Not applicable

Solubility in Water (vol/vol) Material insoluble in water

Drop point >220°C

Temp Range -30°C to >130°C

10. STABILITY AND REACTIVITY

Hazardous decomposition products Combustion will generate smoke, carbon monoxide, carbon dioxide may produce formaldehyde under decomposition by fire.

Hazardous reactions None under normal conditions.

Hazardous properties None under normal conditions.

Materials to avoid Strong oxidizing agents.

Conditions to avoid Naked flames, fires.

11. TOXICOLOGICAL INFORMATION

Inhalation Not expected to prevent a significant inhalation hazard under anticipated conditions of normal use. Inhalation of mists or vapours at elevated temperatures may cause respiratory irritation.

Dermal Repeated or prolonged exposure may have a defatting effect or cause dermatitis.

Ocular Redness, pain may occur.

12. ECOLOGICAL INFORMATION

On Product Prevent entry to sewers and public water ways.

Ecological Effects Not soluble in water, so only minimally bio-degradable

13. DISPOSAL INFORMATION

General Dispose of in a safe manner in accordance with local/national regulations

Disposal method In accordance with local/national regulations may be taken to waste disposal site.

Disposal of used packaging Use a licensed waste disposal contractor.

14. TRANSPORT INFORMATION

Transport: Not classified as hazardous for transport.

15. REGULATORY INFORMATION

EC Classification: The material is not dangerous for transport or supply.

Risk Phrases

None

Safety Phrases:

None

16. OTHER INFORMATION

Shelf life >12 months

References:

* European agreement concerning the international carriage of dangerous goods by road (ADR) volumes I & II 1999

* Commission Directive 93/112/EC of 10/12/93, (O.J. No. 314 of 16/12/93 pg 38)

* Council Directive 67/548/EEC and all appropriate A.T.P'S

Important Note:

1. Before any product is used the label should be carefully read and current safety literature and information consulted.

2. The product information in this Data Sheet is to the best of Hagen Automation's knowledge correct as at the date of publication. User should contact Hagen Automation for updated advice and in any event satisfy themselves that the product is entirely suitable for their purpose.