

Material Safety Data Sheet
Product name: Robotic-00 Grease

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Robotic-00 Grease

Chemical name: Petroleum oil lubricating grease

Supplier: Anglo Design, 2 Beaumont Rd, Mt Kuring-gai, 2080 Australia

Emergency telephone number: +612 9457 8566

Revision Date: December 9, 2003

2. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT CAS# CONCENTRATION

Proprietary Mixture -

No hazardous ingredients -

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

MAY CAUSE EYE IRRITATION.

4. FIRST AID MEASURES

Swallowing

Obtain medical attention. Never give anything by mouth to an unconscious person. Not expected to be toxic by ingestion.

Skin

Wash thoroughly with warm water using a mild soap. If hot material contacts skin, immediately cool before attempting removal. If irritation persists or if contact has been prolonged, obtain medical attention. If high pressure forces the product under the skin get immediate medical attention!

Inhalation

Remove to fresh air. Aspiration may cause pulmonary edema or aspiration pneumonia. If breathing is difficult, oxygen may be given by qualified personnel. Obtain medical attention if symptoms persist.

Eye contact

Immediately flush eyes with water and continue washing for at least 15 minutes. Obtain medical attention immediately.

5. FIRE-FIGHTING MEASURES

Flash point: > 180 °C (> 350 °F)

Autoignition temperature: Not determined

NFPA CLASSIFICATION

Health: 1 Flammability: 1 Reactivity: 0 Special provisions: -

Special fire fighting procedures

Use water spray to cool fire-exposed containers and structures.

Special protective equipment for firefighters

Self-contained breathing apparatus with full face-piece operated in positive pressure mode. Body covering protective clothing, full "turn-out" gear.

Extinguishing media

Suitable: Small fires:

- CO2
- dry chemical
- dry sand
- vermiculite

Large fires:

Treat as an oil fire.

- water fog
- foam

Unsuitable: Oil will float on water and can spread any fire.

Unusual fire and explosion hazards

This product poses no unusual fire fighting problems. Burning can produce the following combustion products:

Oxides of carbon. Oxides of sulfur.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear suitable protective equipment.

Environmental precautions

Prevent from entering sewer system or surface water.

Methods for cleaning up

Stop the leak if it can be done without risk.

Large spill:

Dike area of spill to prevent spreading and pump liquid to salvage tank.

Small spill:

Soak up with absorbent material.

Transfer absorbent material to a suitable waste container.

Dispose according to regulatory requirements.

7. HANDLING AND STORAGE

HANDLING

Handling precautions

Keep drums tightly closed to prevent contamination. Avoid contact with eyes, skin and clothing. Wear recommended personal protection equipment.

Other precautions

Electrically bond and ground all containers and equipment.

STORAGE

Storage requirements

Normal precautions common to good safety practice should be followed in storage.

Further information on storage

Keep away from strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

PERSONAL PROTECTION

Respiratory protection

None required in normal use. NIOSH approved respirator with dual organic vapor/mist and particulates cartridge if vapor concentration exceeds permissible exposure limit.

Hand protection / protective gloves

Wear oil resistant gloves.

Eye protection

Monogoggles

Face shield if risk of splashing

Skin protection

Wear protective clothing, such as long sleeves to minimize skin contact.

Use heat protective equipment (such as gloves, long sleeves, and aprons) when handling molten material.

Industrial hygiene measures

Do not eat or drink at work.

ENGINEERING CONTROLS

Ventilation

For normal applications, special ventilation is not necessary.

Local ventilation is needed in the presence of airborne mists.

EXPOSURE LIMITS

Component Type Value Remark

Mineral Oil Mist TWA (mist), ACGIH 5.0 mg/m³ If used in way that generates a "mist" observe the limits for Mineral Oil Mist.

STEL (mist), ACGIH 10.0 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE

Physical state Semi-solid

Color Light

Odor Mild petroleum

OTHER PROPERTIES

Boiling point

Density 0.95 - 1.05 g/cm³ at 25 °C

Vapor pressure < 0.0008 hPa (0.00 mmHg) at 20 °C

Solubility in water Negligible

Solubility in organic solvents Partially soluble

Partitioning coefficient No data available.

Flash point > 180 °C (> 350 °F)

Method: Open cup

Autoignition temperature Not determined

Kinematic viscosity Not applicable.

10. STABILITY AND REACTIVITY

Stability: This product is stable under normal storage and handling conditions.

Incompatible materials

Avoid contact with:

Oxidizing agents.

Hazardous combustion products

Combustion may produce the following products:

Oxides of carbon.

Oxides of sulfur.

Oxides of calcium.

Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

SWALLOWING

Acute effects

No evidence of harmful effects from available information.

May cause the following effects:

- diarrhea

Chronic effects

No data available.

Test results

Acute toxicity: Remark: No data available.

SKIN ABSORPTION

Acute effects

If high pressure forces the product under the skin get immediate medical attention!

INHALATION

Acute effects

No information available.

Mist or spray may cause the following effects:

- delayed onset of pulmonary edema

SKIN CONTACT

Acute effects

May cause irritation.

EYE CONTACT

Acute effects

May cause irritation.

12. ECOLOGICAL INFORMATION

No information available. This product is stable in water, and can be mechanically separated from water. The water may be suitable for disposal in a biological waste water treatment plant.

13. DISPOSAL CONSIDERATIONS

General: The generation of waste should be avoided or minimised wherever possible. Dispose of in accordance with appropriate Federal, State, and local regulations. Incinerate in a furnace where permitted under appropriate Federal, State, and local regulations.

14. TRANSPORT INFORMATION

DOT Classification

This product is not regulated by DOT.

Freight description road: 65 PETROLEUM OIL, N.O.I.B.N

IMDG Classification

This product is not regulated by IMDG.

ICAO Classification

This product is not regulated by ICAO.

15. REGULATORY INFORMATION

CHEMICAL INVENTORY

Canada: The ingredients of this product are on the DSL.

United States: The ingredients of this product are on the TSCA inventory.

16. OTHER INFORMATION

HMIS RATING

Health: 1 Flammability: 1 Reactivity: 0 PPI: -

LEGEND

STP Standard temperature and pressure

W/W Weight/Weight

0 (HMIS) Minimal hazard

1 (HMIS) Slight hazard

2 (HMIS) Moderate hazard

3 (HMIS) Serious hazard

4 (HMIS) Severe hazard

X (HMIS) Personal protection rating to be supplied by user depending on use conditions

The opinions expressed herein are those of qualified experts within AnglomOil/Crompton Corporation. We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and of these opinions and the conditions of use of this product are not within the control of AnglomOil/Crompton Corporation, it is the user's obligation to determine the conditions of safe use of the products.