

MATERIAL SAFETY DATA SHEET

GLIDE TECHNOLOGY SDN BHD (759475-T)

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1- IDENTIFICATION

Product Name : MICROGLIDE RADIATOR COOLANT (PREMIX 50:50)

2- COMPOSITION

Additivated Lubricating Oil: Complex combinations of hydrocarbons obtained (from vacuum distillation) by solvent extraction and dewaxing processes; mainly consisting of saturated hydrocarbons having carbon numbers C₁₅-C₅₀ and special additive package incorporated in small quantity.

3- HAZARDS

Human:

Inhalation - Short-term exposures to vapors and oil mists cause irritation of the respiratory tract. Long-term exposures can cause lung fibrosis preceded by broncho-pulmonary symptoms in concentrations over 5 mg/m³ (TLV).

Ingestion - Low oral toxicity: toxicity by ingestion: Grade O; LD 50 > 15g/Kg (oral-rat). Intestinal absorption is very low. Accidental intake of large amounts causes irritation of the gastrointestinal tract, nausea, vomiting and diarrhea.

Contact/Skin - Low skin toxicity: LD 50 > 5g/Kg (rat), level considered to be harmless in short-term exposures. Long-term exposures produce smarting, redness, irritation and dermatitis due to defatting of the keratyn layer. No skin sensitization has been registered in animal tests or human cases.

Eyes - Repeated exposure to vapors or liquid cause irritation.

Environment:

Combustible. Lighter than water; it can obstruct sewers and water intakes.

4- FIRST-AID

Skin	: Flush with plenty of soap and water
Eyes	: Flush with plenty of water for at least 15 minutes.
Ingestion	: Do not induce vomiting. If conscious, have the victim drink water or milk.
Inhalation	: Move the victim to fresh air; administer oxygen if necessary. Call for medical attention.

5- FIRE PRECAUTIONS

Extinguishing Media Suitable	: Foams, dry chemicals, CO ₂ , nylons and powders
Non-suitable	: Water, may be ineffective
Protection Equipment	: Heat resistant suit and gloves. Self-contained breathing apparatus.
Special Risks	: NP
Special Measures	: Not required
Combustion Products	: CO ₂ , H ₂ O, CO (in defect of air), nitrogen, sulfur and phosphorus Oxides

6- ACCIDENT PRECAUTIONS

Precautions for the Environment:

Hazard of physical fouling to coasts, soils, etc. due to low solubility and high viscosity of the oils. Avoid the material entering water intakes.

Clean-up Method:

Treat as an accidental oil spill or leak; avoid dispersion of the material with mechanical barriers. Remove with physical or chemical treatment.

Personal Precautions	: Avoid prolonged contact with contaminated clothes or with the product
Personal Protection	: Gloves and goggles or face shield

7- STORAGE AND HANDLING

Handling:

- General Precautions** : Avoid prolonged contact and inhalation of mists and vapors from heated oils
- Specific Conditions** : Safety goggles and gloves should be used

Storage:

- Storage Conditions** : Containers properly labeled and sealed, placed in cool and well ventilated areas
- Incompatible Materials** : Strong oxidants
- Dangerous Practices** : NP

8- PERSONAL PROTECTION

Inhalation

Low vapor pressures: The product is slightly volatile at room temperature and does not present special risks. In presence of heated oils, wear protective masks to avoid vapor inhalation.

- Skin** : Gloves
- Eye** : Safety goggles
- Other** : Showers and eye-washers in the working area.
- Specific Hygiene Measures** : Good work practices to minimize exposure and adoption of good personal hygiene measures avoid the presence of skin rash and oil Acne
- Exposure Controls** : TLV (typical base oil) = 0.016 PPM at 20°C (saturated vapor Concentration); TLV/TWA (ACGIH) = 5mg/m³ (oil mist); TLV/STEL (ACGIH) = 10mg/m³ (oil mist)

9- PHYSICAL AND CHEMICAL PROPERTIES

- Specific Gravity (at 15° C)** : 1.0
- Flash Point** : 111° C
- Explosive Properties** : NP
- Oxidizing Properties** : NP
- Water Solubility** : Insoluble (100 PPM max. H₂O)
- Solubility** : Organic solvents

10- STABILITY AND REACTIVITY

- Stability** : Stable at room temperature
- Polymerization Risk** : NP
- Materials to Avoid** : Strong oxidants react with oils and organic materials
- Hazardous Decomposition Products** : NP
- Condition to Avoid** : Exposure to open flames

11- TOXICOLOGICAL INFORMATION

- Routes of Exposure** : Contact with skin, eyes and inhalation. Ingestion is not frequent.
- Acute and chronic Effects** : No malignant acute effects are known. Chronic effects due to repeated exposures are irritation, dermatitis and acne.
- Carcinogenicity** : NP
- Reproductive Toxicity** : No evidences
- Medical Conditions which Increase Hazard to Exposure** : Respiratory tract deficiencies and dermatological problems

12- ECOLOGICAL INFORMATION

Pollutant Potential:

Persistence and Degradability- the material is oily and viscous and floats on water. It presents a high physical fouling potential, mainly in sea-spills; by contact, destroys small aquatic organisms and makes living difficult for upper organisms, not allowing the sunlight to reach underlying marine ecosystems, affecting its normal development.

Mobility/Bioaccumulative Potential- it does not present bioaccumulative problems in living organisms or incidence in the tropic food chain, although it may cause long-term adverse effects in the aquatic environment, due to its high physical fouling potential.

Eco toxicological Effect:

Dangerous for aquatic life in high concentrations (spills).

13- DISPOSAL

Disposal Methods (surplus) : Recycling and recovery of base oils when possible

Disposal (waste) : Only in specific prepared and controlled areas. Avoid releasing oils to sewers because they can destroy water treatment plant Microorganisms. Do not attempt to clean containers since residue is difficult to remove; dispose in a safe way.

Handling (waste) : Labeled and sealed containers. Avoid direct contact with waste oils.

14- TRANSPORTATION

Special Precautions : Stable at room temperature and during transport. Store in cool well ventilated areas.

UN Number : NP

ADR (TPC)/RID (TPF) Classification : -

IATA-DER Classification : -

IMDG Classification : -

15- REGULATORY INFORMATION

Regulatory Lists Searched : 01-1=IARC Group 1
01-2A=IARC Group 2A
01-2B=IARC Group 2B

No components of this material were found on the regulatory lists above.

Chemical Safety Assessment : This product contains substances for which chemical safety assessments are not yet available.

16- OTHER INFORMATION

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorized use of this information or for any modified or altered versions.

This product must be stored, handled and used according to correct industrial hygienic practices and in compliance with laws in force.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date indicated. However no representation, warranty or guarantee is made as to its accuracy, reliability or completeness.

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