

MATERIAL SAFETY DATA SHEET

ERG 1000

Premium Synthetic Refrigeration Oil.

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2 IDENTIFICATION / PRODUCT NAME

PRODUCT NAME: **ERG 1000**
MANUFACTURER CODE: ERG 1000 Premium Synthetic Refrigeration Oil
UN Number NA Hazchem Code NA
Worksafe Classification: Not Hazardous by Worksafe Criteria

2. PHYSICAL DESCRIPTION / PROPERTIES

GENERIC COMPOSITION: SYN. HYDROCARBONS AND ADDITIVES
INGREDIENTS CONSIDERED HAZARDOUS TO HEALTH:

This product is not formulated to contain ingredients which have exposure limits established by regulatory agencies. It is not hazardous to health as defined by the Worksafe Australia criteria. See Section 15 for a regulatory analysis of the ingredients.

See Section 15 for European Label Information.

3. HAZARDS IDENTIFICATION

EFFECTS OF OVEREXPOSURE: No significant effects expected.

4. FIRST AID MEASURES

EYE CONTACT:

Flush thoroughly with water. If irritation persists, call a doctor.

SKIN CONTACT:

Wash contact areas with water.

INHALATION: Not expected to be a problem.

INGESTION: Not expected to be a problem.

However, if greater than ½ litre (pint) ingested, seek medical attention.

NOTE TO PHYSICIANS:

Treat symptoms with reference to specific health effects identified above.

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5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Foam, dry chemical, CO2 and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing.

Use water to cool fire-exposed containers. Water spray may be used to flush spills away from exposures. Prevent runoff from fire control or dilution from entering waterways, sewers or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire-fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None.

Flash Point C (F): 245(473) (IP 36 / ASTM D-92). Flammable limits -LEL NA, UEL NA.

NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide. Elemental oxides. Metal oxides.

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills as required to appropriate authorities such as the local Environmental Health Officer or Fire Brigade. If spills are likely to enter any drain, waterway

or groundwater, contact the Area Water Authority. In case of accident or road spill, contact the Police and Fire Brigade and, if appropriate, the Area Water Authority.

PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Contain and adsorb on suitable chemical absorbent material, etc. Shovel up and dispose of at an appropriate licensed waste disposal site in accordance with current applicable laws and regulations and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material. See Section 15 for Regulatory information when storing this product.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: No special requirements under ordinary conditions of use and with adequate ventilation.

RESPIRATORY PROTECTION: No special requirements under ordinary conditions of use and with adequate ventilation.

EYE PROTECTION: Normal industrial eye protection practices should be employed.

SKIN PROTECTION: No special equipment required. However, good personal hygiene practices should always be followed.

EXPOSURE LIMITS: This product does not contain any components which have recognized exposure limits. However, a product exposure limit of 5.00 mg/m³ is suggested for oil mist (NOSHC).

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below.

PHYSICAL STATE:	Liquid
COLOUR:	Clear
ODOUR:	Mild
ODOUR THRESHOLD (ppm):	NE
pH:	NA
Boiling Point C (F):	> 316(600)
Melting Point C (F):	NA
Flash Point C(F):	245(473) (IP 36 / ASTM D-92)
FLAMMABILITY:	NE
AUTO FLAMMABILITY:	NE
EXPLOSIVE PROPERTIES:	NA
OXIDIZING PROPERTIES:	NA
Vapour Pressure-mm Hg 20 C:	< 0.1
VAPOUR DENSITY:	> 2.0
EVAPORATION RATE:	NE
Relative Density, 15/4 C:	0.834
Solubility in Water:	Negligible
PARTITION COEFFICIENT:	> 3.5
Viscosity at 40 C, cSt:	62.0
Viscosity at 100 C, cSt:	10.1
Pour Point C:	-55(-67)
FREEZING POINT C(F):	NE

NA=Not Applicable, NE=Not Established, D=Decomposes

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10. STABILITY AND REACTIVITY

STABILITY (Thermal, Light, etc.): Stable.

CONDITIONS TO AVOID: Extreme heat.

INCOMPATIBILITY (Materials to Avoid): Strong oxidisers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide. Elemental oxides. Metal oxides.

HAZARDOUS POLYMERISATION: Will not occur.

11. TOXICOLOGICAL DATA

ACUTE TOXICOLOGY

ORAL TOXICITY: Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

DERMAL TOXICITY: Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

INHALATION TOXICITY: Not applicable Harmful concentrations of mists and/or vapours are unlikely to be encountered through any customary or reasonably foreseeable handling, use, or misuse of this product.

EYE IRRITATION: Practically non-irritating. (Draize score: greater than 6, but 15 or less). ---Based on testing of similar products and/or the components.

SKIN IRRITATION: Practically non-irritating. (Primary Irritation Index: greater than 0.5, but less than 3). ---Based on testing of similar products and/or the components.

OTHER ACUTE TOXICITY DATA: The acute toxicological results summarized above are based on testing of representative products and formulations administered via the inhalation route, have shown no acute effects, when tested at maximum attainable oil mist or vapour concentrations.

OTHER TOXICOLOGY DATA

This product is formulated with a synthetic hydrocarbon as the base stock. The Environmental & Health Sciences Laboratory has tested representative synthetic base stocks to assess their potential adverse effects on human health. Assessment of human health effects was based on acute oral, dermal, and inhalation toxicity; eye & skin irritation; subchronic dermal toxicity & reproductive studies; guinea pig sensitization; and mutagenicity & chromosomal damage assays. None of these base stocks appears to pose a health hazard to humans under conditions of expected use.

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12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE AND EFFECTS: This product is expected to be inherently biodegradable. There is no evidence to suggest bio-accumulation will occur.

Acute LC/EC50: Juvenile Rainbow Trout: Practically non-toxic ---Based on testing of similar products.

Accidental spillage may lead to penetration in the soil and groundwater. However, there is no evidence that this would cause adverse ecological effects.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited by the local authority. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate licensed waste disposal site. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

14. TRANSPORT INFORMATION

ACTDG: NOT REGULATED BY ACTDG.

IMO: NOT REGULATED BY IMO

IATA: NOT REGULATED BY IATA

15. REGULATORY INFORMATION

Governmental Inventory Status: All components comply with European EINECS/ELINCS, US TSCA, Australian AICS and Japanese MITI.

Australian Classifications:

UN Number: NA

HAZCHEM Code: Not applicable

Dangerous Goods Class/Subsidiary Risk: Not applicable

Packaging Group: NA

AS 1940 Class: C2

Poisons Schedule: Not applicable

Worksafe Classification: Not Hazardous by Worksafe criteria

EC Labelling: EC labelling not required.

THE FOLLOWING PRODUCT INGREDIENTS ARE CITED ON THE LISTS BELOW:

CHEMICAL NAME CAS NUMBER LIST CITATIONS

NO REPORTABLE INGREDIENTS

REGULATORY LISTS SEARCHED

1=IARC 1 2=IARC 2A 3=IARC 2B 4=NTP CARC 5=NTP SUS

6=ACGIH 7=ACGIH CARC 8=ACGIH SUS

CARC=CARCINOGEN;SUS=SUSPECTED CARCINOGEN; TERAT=TERATOGENIC

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16. OTHER INFORMATION

USE: LUBRICANT

NOTE: ERG PRODUCTS ARE NOT FORMULATED TO CONTAIN PCBS.

This MSDS meets Worksafe Australia accepted format requirements.

Legally required information is given in accordance with applicable Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT.

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