

# MATERIAL SAFETY DATA SHEET

## SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Hydro-Balance Mineral Refrigeration Oil #3  
Product Number(s): H-2301, H-2305, H-2355  
Product Use: Compressor lubricant

Date Prepared May 15, 2009  
Replaces Feb. 28, 2007

Company Name: North American Research Corporation  
P.O. Box 1318  
Lewisville, TX 75067

Telephone Numbers: (972) 492-1800, (800) 527-7520, Fax (972) 394-6755  
Emergencies: Infotrac (800) 535-5053 (24 hours, everyday)

## SECTION 2 COMPOSITION / INFORMATION ON INGREDIENTS

	CAS Registry No.	OSHA PEL	ACGIH TLV	Other Limits	% (Optional)
Naphthenic Petroleum Oil	64742-44-5	5 mg/m <sup>3</sup> (oil mist)	5 mg/m <sup>3</sup> (oil mist)	None	100

## SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Not expected to cause a severe emergency hazard. Use of adequate ventilation will avoid aspiration of oil mists. Wash skin after contact; prolonged contact with any oils can cause irritation in some individuals.

### POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY: Skin

INHALATION: No acute effects are expected in normal use.

SKIN: No significant adverse health effects are expected to occur upon short-term exposure.

EYES: Tests on similar materials suggest that no eye effect be expected.

INGESTION: No significant adverse health effects expected. Practically non-toxic.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Personnel with pre-existing skin disorders should avoid contact with this product

CHRONIC EFFECTS: Prolonged and/or repeated contact with this material may produce irritation and inflammation.

Not listed as a carcinogen by NTP, IARC, OSHA, or ACGIH.

This product does not require a cancer hazard warning in accordance with the OSHA Hazard Communication Standard.

## SECTION 4 FIRST AID MEASURES

INHALATION: Not likely to occur except as mist. Remove patient to fresh air and consult a physician. If breathing is difficult, give oxygen. If not breathing, give artificial respiration.

SKIN: Remove contaminated clothing and shoes. Thoroughly wash contact area with soap and water. Get medical attention if irritation or rash develops. Wash clothing before reuse.

EYES: Immediately flush eyes with large amounts of water for at least 15 minutes while frequently lifting the upper and lower eyelids. If irritation persists, call a physician.

INGESTION: Product is practically non-toxic. DO NOT induce vomiting. Contact a physician or emergency medical facility immediately.

## SECTION 5 FIRE-FIGHTING MEASURES

FLASHPOINT: >330°F (166°C) METHOD: COC ASTM D92 LEL: Not determined UEL: Not determined

FLAMMABILITY CLASS: IIIB

AUTOIGNITION TEMP: >650°F (343°C)

EXTINGUISHING MEDIA: Dry chemical, carbon dioxide, water fog and foam. NOTE: Water fog and foam may cause frothing and spattering

HAZARDOUS COMBUSTION PRODUCTS: Fumes, smoke, and carbon monoxide.

### FIRE FIGHTING INSTRUCTIONS

Use flooding quantities of water as fog or spray to keep fire-exposed containers cool. Firefighters should wear self-contained breathing apparatus.

## SECTION 6 ACCIDENTAL RELEASE MEASURES

Shut off ignition sources. Contain spill and keep from entering waterways or sewers. Use personal protective equipment. Absorb with inert material. Shovel, sweep, or vacuum spill.

## SECTION 7 STORAGE AND HANDLING

### STORAGE CONDITIONS:

Store in labeled, sealed containers in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Do not remove or deface label. Prevent water or moist air from entering containers. Do not reuse containers.

**HANDLING PROCEDURES:**

Wash hands before eating, drinking, or using the restroom. Any clothing or shoes which become contaminated should be removed immediately and thoroughly washed before wearing again.

---

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

EXPOSURE LIMITS: See section 2.

RESPIRATORY PROTECTION: Normally not required. If used where mist may occur at high levels, use NIOSH/MSHA approved apparatus.

EYE PROTECTION: Wear safety glasses. Have suitable eyewash water available.

SKIN PROTECTION: Avoid prolonged and/or repeated contact. If prolonged contact cannot be avoided, wear protective impervious gloves and clothing. Acceptable materials for gloves are PVC, Neoprene, Nitrile, Polyvinyl Alcohol, or Viton.

ENGINEERING CONTROLS (Ventilation): Use adequate ventilation to keep oil mist below 5 mg/m<sup>3</sup>.

---

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

---

APPEARANCE AND ODOR: Clear, pale, straw-colored liquid; light bland petroleum odor.

SPECIFIC GRAVITY: 0.91

VAPOR PRESSURE: <0.001 mm Hg @ 20°C/68°F

MOLECULAR WEIGHT: 326.00

MELTING POINT: -53°F (-47°C) D97

VAPOR DENSITY: >5 (Air = 1)

SOLUBILITY IN WATER: Negligible

pH: Not applicable

BOILING POINT: >500°F (260°C) D86

VISCOSITY: 150 SUS @ 100°F

VOLATILES, % BY VOLUME: nil

EVAPORATION RATE: 1000X slower than ethyl ether

---

**SECTION 10 STABILITY AND REACTIVITY**

---

STABILITY: Stable

CONDITIONS TO AVOID: Ignition sources (sparks, open flame, heated surfaces).

INCOMPATIBILITY (Materials to Avoid): Strong oxidizers.

HAZARDOUS POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may produce carbon monoxide and other asphyxiants.

---

**SECTION 11 TOXICOLOGICAL INFORMATION**

---

ACUTE TOXICITY: Minimal irritation on contact.

CHRONIC TOXICITY: This product has not been found to be carcinogenic or a potential carcinogen. It is not listed by NTP, IARC, OSHA, or ACGIH. Nevertheless, good industrial hygienic practices are recommended.

---

**SECTION 12 ECOLOGICAL INFORMATION**

---

No specific data are available.

---

**SECTION 13 DISPOSAL CONSIDERATIONS**

---

Dispose of in accordance with federal, state, and local regulations. Not an RCRA hazardous waste if uncontaminated. If used, RCRA criteria must be determined.

---

**SECTION 14 TRANSPORT INFORMATION**

---

U.S. Department of Transportation:

Not regulated

---

**SECTION 15 REGULATORY INFORMATION**

---

TSCA: All components of this product are listed or are excluded from listing on the U.S. Toxic Substances Control Act (TSCA) Chemical Substances Inventory.

CERCLA: No reportable ingredients

SARA TITLE III:

Section 311/312 Hazard Category: Acute: Yes      Chronic: No      Fire: No      Pressure: No      Reactive Hazard: No

Section 313 Reportable Ingredients: None

CALIFORNIA (Proposition 65): No reportable ingredients.

---

**SECTION 16 OTHER INFORMATION**

---

NFPA RATING: Health – 0, Flammability – 1, Reactivity – 0

HMIS<sup>®</sup> RATING: Health – 0, Flammability – 1, Reactivity – 0

HMIS<sup>®</sup> ratings are to be used with a fully implemented HMIS<sup>®</sup> program. HMIS<sup>®</sup> is a registered mark of the National Paint and Coatings Association (NPCA).

NOTICE: This document has been prepared using data from sources considered technically reliable. It does not constitute a warranty, express or implied, as to accuracy of the information contained within. Actual conditions of use and handling are beyond seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all federal, state, provincial, and local laws and regulations.