

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Hydro-Balance ISO 32 Synthetic Ester Refrigeration Lubricant

Date Prepared Nov. 2, 2010

Product Number(s): P-3201, P-3232, P-3205

Product Use: Polyol Ester Compressor Lubricant

Replaces Mar. 28, 2005

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)
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Contains no hazardous ingredients as defined by OSHA 29 CFR 1910.1200

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Clear, colorless liquid. Slight petroleum odor.

POTENTIAL HEALTH EFFECTS

INHALATION: Under normal use conditions, this product is not an inhalation hazard.

SKIN: May cause irritation on repeated or prolonged contact.

EYES: Minor irritant. Avoid contact as good industrial practice.

INGESTION: May cause nausea. Not expected to be acutely toxic by ingestion.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

CHRONIC EFFECTS: None known.

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: >464°F (240°C) METHOD: COC LEL: Not determined UEL: Not determined

AUTOIGNITION TEMP: Not determined

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

Large spills: Wear appropriate protective clothing. Stop source of leak if possible. Contain spill and keep from entering waterways or sewers. Absorb with inert material. Shovel, sweep, or vacuum spill.

Small Spills: Soak up with inert absorbent or wipe up with rags and dispose of properly.

SECTION 7 STORAGE AND HANDLING

STORAGE CONDITIONS:

Store in labeled, sealed containers in a cool, dry, well-ventilated area. Keep containers tightly closed until time of use. Refrigeration lubricants are hygroscopic and will absorb moisture from the air. Do not reuse containers. Do not remove or deface label.

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: None established. 5 mg/m³ generally recommended for oil mist.

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/m³.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, colorless liquid; light bland petroleum odor.

SPECIFIC GRAVITY: 0.98

VAPOR PRESSURE: Negligible

MOLECULAR WEIGHT: Not determined

MELTING POINT: Not determined

VAPOR DENSITY: >5 (Air = 1)

SOLUBILITY IN WATER: Insoluble

pH: Not applicable

BOILING POINT: >500°F (260°C)

VISCOSITY: 32 cSt @ 40°C

VOLATILES, % BY VOLUME: nil

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: No 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 – 1, Flammability – 1, Reactivity – 0

HMIS® RATING: Health – 1, Flammability – 1, Reactivity – 0

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