

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Product Name: Hydro-Balance Z 200cx Alkylbenzene Refrigeration Oil	Date Prepared	Mar. 28, 2005
Product Number(s): Z200 01	Replaces	Apr. 12, 2000
Product Use: Synthetic Alkylbenzene compressor lubricant		
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

	<u>CAS</u> <u>Registry No.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>Other</u> <u>Limits</u>	<u>%</u> <u>(Optional)</u>
Alkylate	68855-24-3	5 mg/m ³ (oil mist)	5 mg/m ³ (oil mist)	None	

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: >311°F (155°C) **METHOD:** Not specified **LEL:** Not determined **UEL:** Not determined

FLAMMABILITY CLASS: IIIB

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

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. 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: 5 mg/m³ 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. Normally not required.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

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

SPECIFIC GRAVITY: 0.87

pH: Not applicable

MELTING POINT: Not applicable

VAPOR PRESSURE: Not determined

SOLUBILITY IN WATER: Negligible

VAPOR DENSITY: Not determined

BOILING POINT: 599°F (315°C)

EVAPORATION RATE: Not determined

VISCOSITY: 200 SUS @ 100°F (40°C)

PERCENT VOLATILES: Not determined

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[®] RATING: Health – 0, Flammability – 1, Reactivity – 0

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