MATERIAL SAFETY DATA SHEET

MSDS # 26-HC3

ARCTIC FIRE R&O TURBINE OIL

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: **R&O Turbine Oil**

APPLICATIONS: Turbine Oil

SYNONYMS: Gas Turbine Oil

CAS REGISTRY #: NA

CHEMICAL FAMILY: Petroleum distillates

EMERGENCY PHONE: CHEMTREC – (800) 424-9300 or (703) 527-3887 (collect)

SUPPLIER: Sinclair Oil Corporation
P.O. Box 30825
Salt Lake City, Utah 84130

TELEPHONE / FAX: (888) 340-3466 / (801) 524-2740

2. COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENTS:	CAS#	Typical wt.%
Hydrotreated heavy parraffinic petroleum distillates		97-99
Proprietary additives		1-3

3. HAZARDS IDENTIFICATION

APPEARANCE: Amber

PHYSICAL STATE: Liquid

ODOR: Mild, bland, hydrocarbon odor

EMERGENCY OVERVIEW: No known immediate health hazards.

POTENTIAL HEALTH EFFECTS: May cause minimal irritation

INHALATION: Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness.

EYE CONTACT: May cause minimal irritation, experienced as temporary discomfort. Get medical attention if eye irritation persists.

SKIN CONTACT: Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

INGESTION: If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Give two glasses of water. Get medical attention.

4. FIRST AID MEASURES

INHALATION: If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists.

EYE CONTACT: Flush immediately with water for at least 15 minutes. Seek medical attention if irritation develops or persists.

SKIN CONTACT: Remove contaminated clothing and shoes and wipe excess from skin. Flush skin with water, then wash with soap and water. If irritation occurs, get medical attention. Do not reuse clothing until cleaned. If material is injected under the skin, transport to the nearest medical facility for additional treatment.

INGESTION: Do not induce vomiting. If more than several mouthfuls are swallowed, get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F): above 390 ºF

FLAMMABLE LIMITS: LEL – not determined UEL – not determined

AUTOIGNITION TEMPERATURE: not determined

FLAMMABILTY CLASSIFICATION: Combustible Liquid

GENERAL HAZARD: No unusual or explosive hazards

FIRE FIGHTING INSTRUCTIONS: Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

FIRE FIGHTING EQUIPMENT: HAZARDOUS COMBUSTION PRODUCTS: Use of SCBA in enclosed or confined spaces, or as other wise needed (Bunker gear).

Hazardous Decomposition Products: May produce carbon monoxide

6. ACCIDENTAL RELEASE MEASURES

LAND SPILL: FOR LARGE SPILLS: Remove with vacuum truck or pump to storage/salvage vessels.
FOR SMALL SPILLS: Soak up residue with an absorbent such as clay, sand or other suitable material. Place in non-leaking container and seal tightly for proper disposal.

Reporting: Product is covered by EPA's Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) petroleum exclusion. Releases to air, land, or water are not reportable under CERCLA (Superfund).

WATER SPILL: Treat spill as an oil spill. Spill may be removed from water with boom and vacuuming equipment. Report spills to appropriate authorities. Dispose of in accordance with Federal, State, and Local regulations.

7. HANDLING AND STORAGE

HANDLING / STORAGE: Minimum feasible handling temperatures should be maintained. / Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

8. EXPOSURE CONTROLS, RESPIRATORY & PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide ventilation sufficient to prevent exceeding recommended exposure limits

PERSONAL PROTECTION:

PROTECTIVE CLOTHING: Use full-face shield or chemical goggles, impervious gloves, and boots.

RESPIRATOR: Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air-supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown.

OCUPATIONAL EXPOSURE LIMITS

COMPONENT	*LIMIT*	*TWA*	*STEL*	*CEILING*	*NOTATION*	*OTHER*
Oil Mist	OSHA PEL	5mg/M^3				
Oil Mist	ACGIH TLV	0.2mg/M^3	10mg/M^3			A4

A1= Confirmed Human Carcinogen
A3= Confirmed Animal Carcinogen with Unknown Relevance to Humans
A4= Not Classified as a Human Carcinogen
CNS= Central Nervous System
Skin= Absorption through the skin may contribute to overall exposure

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/PHYSICAL STATE: Liquid

COLOR: amber liquid

DENSITY/SPECIFIC GRAVITY (g/ml): 0.86

VAPOR DENSITY (air=1): Greater than 5

VAPOR PRESSURE: <1 PSIA

BOILING POINT/RANGE: not available

SOLUBILITY IN WATER: No

VISCOSITY: N/A/F

pH : N/A

FREEZING POINT: NA

10. STABILITY AND REACTIVITY

GENERAL: This product is stable

INCOMPATIBLE MATERIALS AND CONDITIONS TO AVOID: Avoid Strong oxidizers, heat and open flames

HAZARDOUS DECOMPOSITION: Incomplete burning can produce carbon monoxide.

11. TOXICOLOGICAL INFORMATION

SYSTEMIC: Petroleum derived fuel oils are complex and variable mixtures of hydrocarbons. In general, the more viscous the mixture, the less toxic it will be.

ACUTE:

Inhalation: : Not determined

Ingestion: LD50 Believed to be > 5.00 g/kg (rat) practically non-toxic

Eye: (Draize) Believed to be < 15 /110 (rabbit) no appreciable effect

Skin: LD50 Believed to be > 2.00 g/kg (rabbit) practically non-toxic

CHRONIC: No data available to indicate the product or its components present a chronic health hazard

12. DISPOSAL INFORMATION

RCRA: Dispose of this product in accordance with local and/or national regulations.

EPA Hazard Class: Not determined

Dispose of in accordance with Federal, State, and Local regulations.

13. TRANSPORT INFORMATION

DOT (Department of Transportation): Not regulated

PROPER SHIPPING NAME: Petroleum Oil

HAZARD CLASS: Not classified as hazardous material for shipping

IDENTIFICATION NUMBER: NA

NAERG96 NUMBER: NA

14. REGULATORY INFORMATION

CERCLA (Comprehensive Environmental Response Compensation and Liability Act):

SARA TITLE III (Superfund Amendments and Reauthorization Act): Section 313 - NA

15. OTHER INFORMATION

NFPA 704/HMIS:

Health – 1 Flammability – 1 Reactivity – 0
(0 = insignificant, 1 = slight, 2 = moderate, 3 = high, 4 = extreme)

REVISION SUMMARY:
Complete review of MSDS, December 2005.

THIS PRODUCT MATERIAL SAFETY DATA SHEET PROVIDES HEALTH AND SAFETY INFORMATION. THE PRODUCT SHOULD BE USED IN APPLICATIONS CONSISTENT WITH THIS PRODUCT LITERATURE. FOR ANY OTHER USES, EXPOSURES SHOULD BE EVALUATED SO THAT APPROPRIATE HADLING PRACTICES AND TRAINING PROGRAMS CAN BE ESTABLISHED TO ENSURE SAFE WORKPLACE OPERATIONS.

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DATE: December 2005