

MATERIAL SAFETY DATA SHEET

Trade Name: Castrol Refrigerant Oil
MSDS NO. 6912
Revision Date: 03/29/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Castrol Refrigerant Oil
Chemical Family: Refrigeration Oil
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300
Supplier:
Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Heavy Hydrotreated Naphthenic Distillates (petroleum) 64742-52-5	95-100	Not known	Mist 5 mg/m3	TLV Mist 5 mg/m3 8 HR.	Not Known

3. HAZARDS IDENTIFICATION

Emergency Overview: Prolonged or repeated skin contact may cause skin irritation. Primary Route of entry is Skin. Tests on similar materials suggest that no eye or skin short-term exposure effects are expected. Personnel with pre-existing skin disorders should avoid contact with this product. Tests on similar materials indicate no significant adverse effects expected by ingestion. This material is practically non-toxic. Harmful or fatal if liquid is aspirated into lungs.

4. FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Ingestion: Product is practically non-toxic. DO NOT INDUCE VOMITING. Give nothing by mouth. Seek immediate medical attention.

Inhalation: Not a hazard under normal use conditions. If overcome by vapor from hot product, immediately remove from exposure and call a physician. If breathing is irregular or has stopped, start resuscitation: administer oxygen, if available. If overexposed to oil mist, remove from exposure until excessive oil mist condition subsides.

Skin Contact: Wash with soap and water. Remove contaminated clothing and launder before reuse. If product is injected into or under the skin, or into any part of the body, the individual should be evaluated immediately by a physician as a surgical emergency.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): >400 F
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): Not Determined
Flammable Limits in Air - Upper (%): Not Determined
Autoignition Temperature °F(°C): > 650 F
Extinguishing Media: Foam. Water fog. Dry chemical. Carbon dioxide. Use water spray to keep containers cool that are exposed to heat or flames.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Fumes and Smoke. Carbon Monoxide. Aldehydes and other decomposition products, in the case of incomplete combustion.

Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.

Spill Procedures: Contain any liquid from leaking containers. Wear protective equipment specified. Only trained and qualified personnel should handle any spilled or leaked product.
Recover free product. Add sand, earth, or other suitable absorbent to spill area. Minimize skin contact. Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land areas. Assure conformity with applicable governmental regulations.

Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Storage: Keep container closed when not in use. Keep away from heat and open flame. Empty oil containers can contain explosive vapors. NFPA Class IIIB storage. Wash thoroughly with soap and water after handling. Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded with material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Use local exhaust. Eyewash stations.
Eyes: Wear safety glasses or goggles to protect against exposure.
Skin Protection: Use chemical resistant gloves for prolonged skin contact. Neoprene coated apron or clothing. Nitrile coated apron or clothing. PVC coated apron or clothing. Viton.
Respiratory Protection: Use local exhaust to capture vapor, mists or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup explosive concentrations of vapor in air. No smoking, or use of flame or other ignition sources.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless to light yellow liquid	pH Value:	Essentially neutral
Odor:	MILD PETROLEUM	Vapor Density (Air=1):	>5
Vapor Pressure:	<.0001 mm Hg @ 20 C	Melting/Freezing Point:	Not determined.
Boiling Point (°F):	>630 F	Bulk Density at 20°C:	Not Determined
Solubility in Water:	NEGLIGIBLE	Evaporation Rate:	1000 x slower than ethyl ether
Molecular Weight:	420	Specific Gravity (H2O=1):	.91
Viscosity:	515 SUS @ 100 F (9.0 cSt @ 100 C)	Decomposition Temperature:	Not Known
VOC Content(%):	<1 %		

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Keep away from heat, sparks and flame. Avoid any source of ignition.
Materials to Avoid: Strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite, etc., as this presents a serious explosion hazard.
Hazardous Decomposition Products: Carbon monoxide. and other asphxiants.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Heavy Hydrotreated Naphthenic Distillates (petroleum) 64742-52-5	95-100	NA	NA	Not known.

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Heavy Hydrotreated Naphthenic Distillates (petroleum) 64742-52-5	95-100	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: This product is not a RCRA hazardous waste if uncontaminated. If "used" RCRA criteria must be determined.

Waste Management: Not determined.

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Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name: Not Regulated
Hazard Class: Not Applicable
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Not Regulated
Hazard Class: Not Applicable
Hazard Subclass: Not Applicable
UN No.: Not Applicable
Packing Group: Not Applicable
Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Heavy Hydrotreated Naphthenic Distillates (petroleum) 64742-52-5	95-100	Not Listed	Not Listed	NA	NA

SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Heavy Hydrotreated Naphthenic Distillates (petroleum) 64742-52-5	95-100	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA:

The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes: Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

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