






Material Safety Data Sheet

NFPA	WHMIS	PPE	Transport Symbol
	Non-controlled	 	Not regulated

Revision Date: 22-Jun-2009

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Daphne Hermetic Oil FD46XG, Drum
Product Code: 3425025
Recommended Use: Refrigerant Oil

Contact Manufacturer
Idemitsu Lubricants America,
701 Port Rd.
Jeffersonville, IN. 47130
Telephone: 812-285-8234
Fax: 812-285-8243
Contact Name: Robin Hutchens
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Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

CAUTION!

Emergency Overview

Harmful if swallowed
Irritating to eyes, respiratory system and skin.

Appearance: Clear Oily Liquid

Physical State: Liquid

Odor: Mild

Potential Health Effects

Principle Routes of Exposure Inhalation, Skin contact.

Acute Effects

Eyes	May cause slight irritation
Skin	Irritating to skin.
Inhalation	Irritating to respiratory system.
Ingestion	Harmful if swallowed.

Chronic Effects This product is not expected to produce neurotoxic effects under normal conditions of use and with appropriate personal hygiene practices. This product contains tricresyl phosphate (TCP). Overexposure to TCP by swallowing, prolonged or repeated breathing of oil mist, or prolonged or repeated skin contact may produce nervous system disorders including gastrointestinal disturbances, numbness, muscular cramps, weakness and paralysis .

See Section 11 for additional Toxicological information.

Signs and Symptoms: Vapors and/or aerosols which may be formed at elevated temperatures may be irritating to eyes and respiratory tract

Potential Environmental Effects See Section 12 for additional Ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazardous Components

Chemical Name	CAS-No	Weight %
Tricresyl Phosphate (TCP) (<1% ortho isomers)	Confidential	1 - 5
Organophosphate	Confidential	1 - 5
Silica Compound	Confidential	1 - 5

4. FIRST AID MEASURES

General Advice Do not breathe dust/fume/gas/mist/vapours/spray. If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

Skin Contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use. If skin irritation persists, call a physician.

Inhalation Move to fresh air in case of accidental inhalation of vapors. If symptoms persist, call a physician.

Ingestion Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or Poison Control Center immediately.

Protection of First-aiders Use personal protective equipment.

5. FIRE-FIGHTING MEASURES

Flammable Properties NFPA: Class IIIB Combustible Liquid

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous Combustion Products Carbon oxides (COx). oxides of phosphorus.

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition

Skin Protection	Wear protective gloves/clothing. Glove Type: Neoprene, Nitriles
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Oily Liquid
Odor:	Mild
Physical State:	Liquid
Flash Point	> 200°C / 392°F
Method	COC ASTM D92
Boiling Point/Range	>200°C / 392°F
Evaporation Rate	Negligible
Vapor Density (Air)	>1.0
Density	0.99 g/cm ³ @15°C
Viscosity	@40C = 61.0 cSt; @100C = 13.0 cSt

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under normal conditions
Conditions to Avoid	Heat, flames and sparks
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Thermal decomposition can lead to release of irritating gases and vapors

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information (Estimated):

LD50 Oral:	24943.94 mg/kg
LD50 Dermal:	200000 mg/kg
LC50 Inhalation:	220000 mg/m ³

Hazardous Components

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Tricresyl Phosphate (TCP) (<1% ortho isomers)	3 g/kg (Rat)		
Organophosphate	890 mg/kg (Rat)		
Silica Compound	5000 mg/kg (Rat)	2000 mg/kg (Rabbit)	2.2 mg/L (Rat) 1 h

Chronic Toxicity**Carcinogenicity:**

There are no known carcinogenic chemicals in this product.

Hazardous Components

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
Organophosphate		Group 3			A4 - Not classifiable as a human carcinogen

Target Organ Effects: Skin, Eyes, Respiratory system.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Environmental hazard assessment.

Hazardous Components

Chemical Name	Freshwater Algae	LC50 Fresh Water Fish	Microtox	Water Flea
Tricresyl Phosphate (TCP) (<1% ortho isomers)		0.21-0.32 mg/L 3.3-6.2 mg/L 0.1-0.22 mg/L 20.4-41.2 mg/L >3.2-<10 mg/L 4.8-6.4 mg/L		
Organophosphate	h EC50 72 6 mg/L	5 mg/L	EC50 = 7.82 mg/L 5 min EC50 = 8.57 mg/L 15 min EC50 = 8.98 mg/L 30 min	
Silica Compound	h EC50 72 440 mg/L	5000 mg/L		h EC50 48 7600 mg/L

Hazardous Components

Chemical Name	EC50/48h/daphnia =	log Pow
Organophosphate		4.17

13. DISPOSAL CONSIDERATIONS**Waste Disposal Method**

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of in accordance with local regulations

14. TRANSPORT INFORMATION

DOT Not regulated

IATA Not regulated

IMDG/IMO

Not regulated

15. REGULATORY INFORMATION**International Inventories****Hazardous Components**

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS	NZIoC
Tricresyl Phosphate (TCP) (<1% ortho isomers)	X	X	-	X	-	X	X	X	X	X	X
Organophosphate	X	X	-	X	-	X	X	X	X	X	X
Silica Compound	X	X	-	X	X	X	X	X	X	X	X

USA**Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

CERCLA/SARA 302 & 304

Section 302 & 304 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 355.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Silica Compound	X		X		
Organophosphate		X			
Tricresyl Phosphate (<1% ortho isomers)	X	X	X		X

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION**Preparation Date** 09-Oct-2007**Revision Date:** 22-Jun-2009**Revision Summary** Not available

Disclaimer:

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

End of MSDS