SAFETY DATA SHEET

This safety data sheet complies with the requirements of: OSHA Hazard Communication Standard (29 CFR 1910.1200)

Product Name: Daphne Hermetic Oil PR, 52.84 Gallon Drum
Product Code: 32450265-94700C020

Revision Date: 14-Sep-2022
Revision Number: 7

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name: Daphne Hermetic Oil PR, 52.84 Gallon Drum

Other means of identification

Product Code: 32450265-94700C020

1.2 Recommended use of the chemical and restrictions on use

Recommended Use: Refrigerant Oil

1.3 Details of the supplier of the safety data sheet

Supplied by:
Idemitsu Lubricants America Corporation
701 Port Rd., Jeffersonville, IN. 47130
Telephone: 1-(812) 284-3300 Business hours: 8am-4:30pm est
Email: Ila.sds@idemitsu.com

24 Hour Emergency Phone Number:
Within USA and Canada: 1 800-424-9300
Outside USA and Canada: + 1 703-741-5970
(collect calls accepted)

2. HAZARDS IDENTIFICATION

2.1 Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).

Skin sensitization	Category 1
Reproductive toxicity	Category 2 Testes

2.2 Label elements

Signal word	**Warning**
Hazard Statements	H317 - May cause an allergic skin reaction H361 - Suspected of damaging fertility or the unborn child if swallowed
Precautionary Statements - Prevention	P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P280 - Wear protective gloves/protective clothing and eye/face protection P261 - Avoid breathing dust, fume, gas, mist, vapors, or spray P272 - Contaminated work clothing should not be allowed out of the workplace
Precautionary Statements - Response	P308 + P313 - IF exposed or concerned: Get medical advice/attention P362 + P364 - Take off all contaminated clothing and wash it before reuse
Skin	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water P363 - Wash contaminated clothing before reuse P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
Precautionary Statements - Storage	P405 - Store locked up
Precautionary Statements - Disposal	P501 - Dispose of contents/ container to an approved waste disposal plant

2.3 Other information

Hazards not otherwise classified (HNOC):	Not applicable
Other hazards	May be harmful in contact with skin Harmful to aquatic life Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixture

Hazardous Components

Chemical name	CAS-No	weight-%	US GHS Classification	Notes
Tricresylphosphate	1330-78-5	1-5	Reproductive 2 (H361) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	
3,4-Epoxycyclohexanecarboxylic acid (3,4-epoxycyclohexylmethyl) ester	2386-87-0	<1	Skin Sens. 1 (H317)	

4. FIRST AID MEASURES

4.1 First Aid Measures

General Advice If symptoms persist, call a physician. Take a copy of the Safety Data Sheet when going for medical treatment.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before re-use. Call a physician immediately.

Eye Contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If eye irritation persists: Get medical advice or attention. IF exposed or concerned: Get medical advice.

Inhalation In case of inadequate ventilation wear respiratory protection. If breathing difficulties develop, move victim away from source of exposure and into fresh air in a position comfortable for breathing. If unconscious place in recovery position and seek medical advice. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Call a physician immediately.

Ingestion Do not induce vomiting without medical advice. If vomiting occurs naturally, have casualty lean forward to reduce the risk of aspiration. Rinse mouth. 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. Avoid contact with eyes, skin and clothing.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms See Section 11 for additional Toxicological information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties	NFPA: Class IIIB Combustible Liquid
5.1 Suitable extinguishing media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment
Unsuitable Extinguishing Media:	Do not use a solid water stream as it may scatter and spread fire.
5.2 Specific Hazards Arising from the Chemical	Keep product and empty container away from heat and sources of ignition.
Hazardous combustion products	During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and / or irritating. Combustion products may include and are not limited to: Carbon oxides Oxides of Phosphorus
Sensitivity to mechanical impact:	No data available.
5.3 Protective Equipment and Precautions for Firefighters:	As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in Section 8. Ensure adequate ventilation. Remove all sources of ignition.

6.2. Environmental precautions

Environmental Precautions	See section 12 for additional ecological information. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Do not allow into any sewer, on the ground or into any body of water. Do not flush into surface water or sanitary sewer system. Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and material for containment and cleaning up

Methods for Clean-up	Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceus earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Spill Management

LARGE SPILLS	Eliminate sources of ignition. Prevent additional discharge of material if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities.
WATER SPILLS	Prevent liquid entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Recover by pumping or with suitable absorbent. If liquid is too viscous for pumping, scrape up. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dusts or mists. Avoid contact with eyes, skin and clothing. Use personal protection recommended in the SDS. Wear protective gloves, protective clothing, eye protection, and face protection. Wash hands thoroughly after handling. Remove and wash contaminated clothing before re-use. Do not eat, drink or smoke when using this product. Should not be released into the environment.
Safe Handling Advice	Handle in accordance with good industrial hygiene and safety practices. Take precautionary measures against static discharges.

7.2. Conditions for safe storage, including any incompatibilities

Storage	Keep in properly labeled containers. Keep container tightly closed in a dry and well-ventilated place.
Technical measures/Precautions	Ensure adequate ventilation.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material (see Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided for a limited time or under certain circumstances.

Personal Protective Equipment

Eye/face protection	Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If splashes are likely to occur wear tight fitting safety goggles and/or face-shield.
Skin protection	Wear protective gloves/clothing. Long sleeved clothing. Choose the appropriate protective clothing and gloves based on the tasks being performed to avoid exposed skin surfaces. **Glove Type:** Neoprene, Nitriles
Respiratory protection	No special protective equipment required. 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	When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Clear Light Yellow
Physical state	Liquid
Odor	Characteristic
Odor Threshold	No information available
pH	Not applicable
Melting point / melting range	Not applicable
Boiling point / boiling range	No information available
Flash Point	> 200 °C / > 392 °F COC ASTM D92
Evaporation Rate	No information available
Flammability Limit in Air	No information available
Explosion Limits	No information available
Vapor pressure @20 °C (kPa)	No information available
Vapor density	No information available
Density	1.02 g/cm^3 @15°C
Solubility(ies)	No information available
Partition coefficient	No information available
Autoignition Temperature	No information available
Decomposing Temperature	No information available
Kinematic viscosity	@40C = 100.1 cSt; @100C = 20.01 cSt

9.2. Other information

No additional information available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Reactivity The product is chemically stable.

10.2. Chemical stability

Chemical Stability Stable under normal conditions.

10.3. Possibility of hazardous reactions

Possibility of Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Conditions to Avoid Heat, flames and sparks.

10.5. Incompatible materials

Incompatible Materials Strong oxidizing agents, Strong acids

10.6. Hazardous decomposition products

Hazardous decomposition products Thermal decomposition can lead to release of irritating gases and vapors.

11. TOXICOLOGICAL INFORMATION

11.1 Information on likely routes of exposure

Inhalation	May cause respiratory irritation.
Eye contact	May cause slight irritation.
Skin Contact	May cause an allergic skin reaction.
Ingestion	May be harmful if swallowed.

11.2 Information on toxicological effects

Symptoms	No information available

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Not classified.
Serious eye damage/eye irritation	Not classified.
Sensitization	May cause an allergic skin reaction.
Mutagenic effects	Not classified.
Reproductive Toxicity	Suspected of damaging fertility or the unborn child if swallowed
Developmental Effects Exposure route	Testes Oral
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified
Aspiration hazard	Not classified.

11.4 Carcinogenicity

Carcinogenicity:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, OSHA or ACGIH.
Legend:	*NTP (National Toxicology Program), IARC (International Agency for Research on Cancer), OSHA (Occupational Safety and Health Administration of the US Department of Labor), ACGIH (American Conference of Governmental Industrial Hygienists)*

11.5 Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Product Information (Estimated):

ATEmix (oral)	> 2,000 mg/kg
ATEmix (dermal)	> 5,000 mg/kg

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Tricresylphosphate 1330-78-5	> 20000 mg/kg (Rat)	> 10000 mg/kg (Rabbit)	> 5.2 mg/L (Rat) 4 h
3,4-Epoxycyclohexanecarboxylic acid (3,4-epoxycyclohexylmethyl) ester	= 5000 mg/kg (Rat)	20 mL/kg (Rabbit)	-

2386-87-0			

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Ecotoxicity effects

Harmful to aquatic life with long lasting effects. Plants and animals may experience harmful or fatal effects when coated with petroleum products. Petroleum-based (mineral) lubricating oils normally will float on water. In stagnant or slow-flowing waterways, an oil layer can cover a large surface area. As a result, this oil layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway may be sufficient to cause a fish kill or create an anaerobic environment.

Chemical name	96h LC50 (fish - mg/L) (96HLCF)	48h EC50 (daphnia - mg/L) (48HLCD)	72h LC50 (algae - mg/L) (72HICA)
Tricresylphosphate	0.75	0.27	0.56
3,4-Epoxycyclohexanecarboxylic acid (3,4-epoxycyclohexylmethyl) ester	24	40	110
2,6-di-tert-butyl p-cresol	5.01	0.48	0.42

12.2 Persistence and degradability No information available.

12.3. Bioaccumulative potential .

Chemical name	Partition coefficient
Tricresylphosphate 1330-78-5	5.93
3,4-Epoxycyclohexanecarboxylic acid (3,4-epoxycyclohexylmethyl) ester 2386-87-0	1.34

12.4 Mobility in Environmental Media No information available.

12.5 Other adverse effects: No information available.

PBT and vPvB assessment No information available

13. DISPOSAL CONSIDERATIONS

Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly, it is the responsibility of the user to determine the proper storage, transportation, treatment and/or disposal methodologies for spent materials and residues at the time of disposition.

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

DOT - Bulk Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA	All ingredients are on the inventory or exempt from listing
DSL/NDSL	All ingredients are on the inventory or exempt from listing
EINECS	All ingredients are on the inventory or exempt from listing
ENCS	All ingredients are on the inventory or exempt from listing
IECSC	All ingredients are on the inventory or exempt from listing
KECL	All ingredients are on the inventory or exempt from listing
PICCS	All ingredients are on the inventory or exempt from listing
AICS	All ingredients are on the inventory or exempt from listing
NZIoC	All ingredients are on the inventory or exempt from listing
REACH	To obtain information on the REACH compliance status of this product, please e-mail ila.sds@idemitsu.com

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances
NZLOC - New Zealand Inventory of Chemicals
REACH- Registration, Evaluation, Authorisation, and Restriction of Chemicals

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 above threshold values of the reporting requirements of this Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous Categorization

Acute health hazard	Skin Sensitizer, Reproductive Toxicity
Chronic Health Hazard	Skin Sensitizer, Reproductive Toxicity
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 > 0.1%.

State Regulations

California Proposition 65

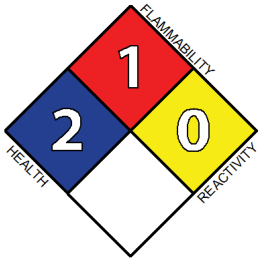
Label: This product does not contain any Proposition 65 chemicals

State Right-to-Know

Chemical name	CAS-No	weight-%	New Jersey
Tricresylphosphate	1330-78-5	1-5	X

New Jersey Worker and Community Right-to-Know Act:
Under the New Jersey Right-to-Know Act L. 1983 Chapter 315 N.J.S.A. 34:5A-1 et. seq., the product is to be identified as follows:
PETROLEUM OIL (Lubricating Oil)

16. OTHER INFORMATION



NFPA **Health hazards:** 2 **Flammability:** 1 **Instability:** 0

Prepared By: Aaron Keck

Revision Date: 14-Sep-2022

Revision Summary: Hazard Statements Review

Disclaimer:
The information provided on this SDS 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 Safety Data Sheet