



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
US OSHA Hazard Communication Standard (29 CFR 1910.1200)

Revision date 09-18-2025

Revision Number 1.1

## 1. Identification

### Product identifier

Product Name MARINE HYDRAULIC OIL 15

### Other means of identification

Product Code(s) RPHY004

Former Product Code(s) 301886

Synonyms None

### Recommended use of the chemical and restrictions on use

Recommended use Lubricant

Restrictions on use Consumer use

### Details of the supplier of the safety data sheet

#### Manufacturer Address

Lubrication Engineers, Inc.  
1919 E. Tulsa  
Wichita, KS 67216  
USA  
1-800-537-7683

### Emergency telephone number

Website [www.royalpurpleind.com](http://www.royalpurpleind.com)

Emergency Telephone CHEMTREC: 1-800-424-9300 (NORTH AMERICA)  
+1-703-527-3887 (INTERNATIONAL)

## 2. Hazard(s) identification

### Classification of the substance or mixture

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Aspiration hazard	Category 1

### Hazards not otherwise classified (HNOC)

Not applicable.

### Label elements



Danger

**Hazard statements**

Harmful if inhaled. May be fatal if swallowed and enters airways.

**Precautionary Statements - Prevention**

Avoid breathing dust, fume, gas, mist, vapors and spray.

Use only outdoors or in a well-ventilated area.

**Precautionary Statements - Response**

IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor if you feel unwell.

**Precautionary Statements - Storage**

Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents and container in accordance with local, regional, national, and international regulations as applicable.

**Unknown acute toxicity**

3.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available.

**Other information**

May be harmful in contact with skin.

**3. Composition/information on ingredients****Substance**

Not applicable.

**Mixture**

Chemical name	CAS No.	Weight-%	Trade secret
Petroleum distillates, hydrotreated heavy paraffinic; >20.5 cSt	64742-54-7	50 - 60	*
1-Decene, dimer, hydrogenated	68649-11-6	30 - 40	*
methylene bis(dibutyldithiocarbamate)	10254-57-6	1 - 5	*
2,6-di-tert-butylphenol	128-39-2	0.1 - 1	*

Identifiers above that are not CAS RN are internally assigned unique identifiers. \*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. First-aid measures****Description of first aid measures****General advice**

Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.

**Inhalation**

Aspiration into lungs can produce severe lung damage. If breathing has stopped, give

artificial respiration. Get medical attention immediately. Remove to fresh air. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. If breathing is difficult, (trained personnel should) give oxygen. Delayed pulmonary edema may occur.

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash skin with soap and water. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. Do NOT induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Rinse mouth. Never give anything by mouth to an unconscious person. Get immediate medical attention.
<b>Self-protection of the first aider</b>	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required. Avoid breathing vapors or mists. See section 8 for more information.

#### **Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	Difficulty in breathing. Coughing and/ or wheezing. Dizziness.
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#### **Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.
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### **5. Fire-fighting measures**

<b>Suitable Extinguishing Media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	Do not scatter spilled material with high pressure water streams.
<b>Specific hazards arising from the chemical</b>	Not easily combustible. Product may ignite and burn at temperatures exceeding the flash point.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment and precautions for fire-fighters</b>	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### **6. Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

<b>Personal precautions</b>	Ensure adequate ventilation. Use personal protective equipment as required. Avoid breathing vapors or mists.
<b>Other information</b>	Refer to protective measures listed in Sections 7 and 8.

#### **Methods and material for containment and cleaning up**

<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
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<b>Methods for cleaning up</b>	Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
<b>Prevention of secondary hazards</b>	Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. Handling and storage

### Precautions for safe handling

<b>Advice on safe handling</b>	Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapors or mists. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product.
<b>General hygiene considerations</b>	Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

<b>Storage Conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Store away from other materials.
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## 8. Exposure controls/personal protection

### Control Parameters

#### Exposure Limits

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Petroleum distillates, hydrotreated heavy paraffinic; >20.5 cSt 64742-54-7	TWA: 5 mg/m <sup>3</sup> inhalable particulate matter excluding metal working fluids, highly & severely refined	TWA: 5 mg/m <sup>3</sup> (vacated) TWA: 5 mg/m <sup>3</sup>	IDLH: 2500 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>

<b>Biological occupational exposure limits</b>	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.
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### Appropriate engineering controls

<b>Engineering controls</b>	Apply technical measures to comply with the occupational exposure limits.
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### Individual protection measures, such as personal protective equipment

<b>Eye/face protection</b>	If splashes are likely to occur, wear safety glasses with side-shields.
<b>Hand protection</b>	Appropriate hand protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.
<b>Skin and body protection</b>	Appropriate skin and body protection should be selected and used according to the chemical nature, hazards and use of this product and safety requirements of the local jurisdiction.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Physical state	Liquid
Odor (includes odor threshold)	Characteristic

Property	Values	Method
Melting point / freezing point	No data available	
Boiling point (or initial boiling point or boiling range)	No data available	
Flammability	No data available	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	218.8889 °C / 426 °F	ASTM D92
Autoignition temperature	No data available	
Decomposition temperature	No data available	
SADT (°C)	No data available	
pH	No data available	
pH (as aqueous solution)	No data available	
Kinematic viscosity	15 cSt @ 40°C	ASTM D445
Dynamic viscosity	No data available	
Solubility	No data available	
Water solubility	No data available	
Partition coefficient n-octanol/water (log value)	No data available	
Vapor pressure (includes evaporation rate)	No data available	
Density and/or relative density	0.843	ASTM D4052
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	
Particle characteristics		
Particle Size	No data available	
Particle Size Distribution	No data available	

### Other information

### Information with regard to physical hazard classes

## 10. Stability and reactivity

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Excessive heat.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	None known based on information supplied.

## 11. Toxicological information

### Information on likely routes of exposure

### Product Information

<b>Inhalation</b>	Aspiration into lungs can produce severe lung damage. May cause pulmonary edema. Pulmonary edema can be fatal. May cause irritation of respiratory tract. Harmful by inhalation. (based on components).
<b>Eye contact</b>	May cause irritation.
<b>Skin contact</b>	Repeated exposure may cause skin dryness or cracking. May be harmful in contact with skin.
<b>Ingestion</b>	Potential for aspiration if swallowed. May cause lung damage if swallowed. Aspiration may cause pulmonary edema and pneumonitis. May be fatal if swallowed and enters airways.

#### **Symptoms related to the physical, chemical and toxicological characteristics**

**Symptoms** Difficulty in breathing. Coughing and/ or wheezing. Dizziness.

**Acute toxicity** Harmful by inhalation.

#### **Unknown acute toxicity**

3.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### **Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum distillates, hydrotreated heavy paraffinic; >20.5 cSt 64742-54-7	> 15 g/kg ( Rat ) > 24 g/kg ( Rat )	> 5000 mg/kg ( Rabbit )	>5 mg/L ( Rat ) 4 h
1-Decene, dimer, hydrogenated 68649-11-6	> 5000 mg/kg ( Rat )	> 3000 mg/kg ( Rabbit )	= 0.9 mg/L ( Rat ) 4 h = 1.4 mg/L ( Rat ) 4 h
methylene bis(dibutylthiocarbamate) 10254-57-6	= 16000 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	-
2,6-di-tert-butylphenol 128-39-2	> 5000 mg/kg ( Rat )	> 10 g/kg ( Rabbit )	-

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

**Skin corrosion/irritation** Based on available data, the classification criteria are not met.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Respiratory or skin sensitization** Based on available data, the classification criteria are not met.

**Germ cell mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity** Based on available data, the classification criteria are not met.

**DMSO Disclaimer** Product containing mineral oil with less than 3% DMSO extract as measured by IP 346

**Reproductive toxicity** Based on available data, the classification criteria are not met.

**STOT - single exposure** Based on available data, the classification criteria are not met.

**STOT - repeated exposure** Based on available data, the classification criteria are not met.

**Aspiration hazard** May be fatal if swallowed and enters airways.

## 12. Ecological information

### Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated heavy paraffinic; >20.5 cSt 64742-54-7	-	LC50: >5000mg/L (96h, Oncorhynchus mykiss)	-	EC50: >1000mg/L (48h, Daphnia magna)
methylene bis(dibutyldithiocarbamate) 10254-57-6	-	LC50: >0.06mg/L (96h, Oncorhynchus mykiss)	-	-
2,6-di-tert-butylphenol 128-39-2	-	-	-	EC50: =0.45mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

### Bioaccumulation

#### Component Information

Chemical name	Partition coefficient
1-Decene, dimer, hydrogenated 68649-11-6	6.2
methylene bis(dibutyldithiocarbamate) 10254-57-6	8.42
2,6-di-tert-butylphenol 128-39-2	4.5

**Other adverse effects** No information available.

## 13. Disposal considerations

### Disposal methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

## 14. Transport information

### DOT

UN number or ID number Not regulated

### TDG

UN number or ID number Not regulated

<b><u>MEX</u></b>	
UN number or ID number	Not regulated
<b><u>ICAO (air)</u></b>	
UN number or ID number	Not regulated
<b><u>IATA</u></b>	
UN number or ID number	Not regulated
<b><u>IMDG</u></b>	
UN number or ID number	Not regulated

## 15. Regulatory information

### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

### International Inventories

**TSCA** Complies.

\*Contact supplier for details. One or more substances in this product are either not listed on the US TSCA inventory, listed on the confidential US TSCA inventory or are otherwise exempted from inventory listing requirements

<b>DSL/NDL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.
<b>AIIC</b>	Contact supplier for inventory compliance status.
<b>NZIoC</b>	Contact supplier for inventory compliance status.
<b>TCSI</b>	Contact supplier for inventory compliance status.

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - 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

**NZIoC** - New Zealand Inventory of Chemicals

**TCSI** - Taiwan Chemical Substance Inventory

### US 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 Hazard Categories**



Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**CAA (Clean Air Act)**

This product does not contain any substances regulated as pollutants pursuant to Clean Air Act (CAA).

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals:.

Chemical name	California Proposition 65
1,2-Benzenedicarboxylic acid dic9-11 branched alkylesters, c10 rich - 68515-49-1	Developmental
Benzene - 71-43-2	Carcinogen Developmental Male Reproductive
Naphthalene - 91-20-3	Carcinogen
Cumene - 98-82-8	Carcinogen
Ethyl benzene - 100-41-4	Carcinogen
Toluene - 108-88-3	Developmental
Ethyl acrylate - 140-88-5	Carcinogen
Methyl alcohol - 67-56-1	Developmental

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**16. Other information**

<b>NFPA</b>	<b>Health hazards</b> 1	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special hazards</b> -
<b>HMIS</b>	<b>Health hazards</b> 1	<b>Flammability</b> 1	<b>Physical hazards</b> 0	<b>Personal protection</b> -

**Key or legend to abbreviations and acronyms used in the safety data sheet****Legend**

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Europe)
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road (Europe)
AIIC	Australian Inventory of Industrial Chemicals
ATE	Acute Toxicity Estimate
ASTM	American Society for the Testing of Materials
bar	Biological Reference Values for Chemical Compounds in the Work Area
BAT	Biological tolerance values for occupational exposure

BEL	Biological exposure limits
bw	Body weight
Ceiling	Maximum limit value
CMR	Carcinogen, Mutagen or Reproductive Toxicant
DOT	Department of Transportation (United States)
DSL	Domestic Substances List (Canada)
EmS	Emergency Schedule
ENCS	Existing and New Chemical Substances (Japan)
EPA	Environmental Protection Agency
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
ICAO	International Civil Aviation Organization
IECSC	Inventory of Existing Chemical Substances in China
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
ISO	International Organization for Standardization
KECI	Korean Existing Chemicals Inventory
LC50	Lethal Concentration to 50% of a test population
LD50	Lethal Dose to 50% of a test population (Median Lethal Dose)
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
n.o.s.	Not Otherwise Specified
NOAEC	No Observed Adverse Effect Concentration
NOAEL	No Observed Adverse Effect Level
NOELR	No Observable Effect Loading Rate
NTP	National Toxicology Program (United States)
NZIoC	New Zealand Inventory of Chemicals
OECD	Organization for Economic Cooperation and Development
OEL	Occupational exposure limits
OSHA	Occupational Safety and Health Administration of the US Department of Labor
PBT	Persistent, Bioaccumulative and Toxic substance
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PMT	Persistent, Mobile and Toxic
PPE	Personal protective equipment
QSAR	Quantitative Structure Activity Relationship
RID	Agreement concerning the International Carriage of Dangerous Goods by Rail (Europe)
SADT	Self-Accelerating Decomposition Temperature
SAR	Structure-activity relationship
SARA	Superfund Amendments and Reauthorization Act
SDS	Safety Data Sheet
SL	Surface Limit
STEL	Short Term Exposure Limit
STOT RE	Specific target organ toxicity - Repeated exposure
STOT SE	Specific target organ toxicity - Single exposure
TCSI	Taiwan Chemical Substance Inventory
TDG	Transport of Dangerous Goods (Canada)
TSCA	Toxic Substances Control Act (United States)
TWA	Time-Weighted Average
UN	United Nations
VOC	Volatile organic compounds
vPvB	Very Persistent and Very Bioaccumulative
vPvM	Very Persistent and Very Mobile
Sen+	Sensitizer

Sk*	Skin designation
**	Hazard Designation

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Prepared By** Compliance.  
**Revision date** 09-18-2025  
**Revision Note** Initial Release.

**Disclaimer**

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

**End of Safety Data Sheet**