

# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<b>Product Name</b>	<b>CARELUBE HES 46</b>	<b>MSDS#</b>	000000822
		<b>Historic MSDS#:</b>	None.
<b>Supplier</b>	Castrol Marine Americas P.O. Box 4518 Houston, Texas 77210-4518 USA		
<b>EMERGENCY HEALTH INFORMATION:</b>	1 (800) 447-8735		
<b>EMERGENCY SPILL INFORMATION:</b>	1 (800) 424-9300 CHEMTREC (USA)		
<b>OTHER PRODUCT INFORMATION</b>	1 (866) 4 BP - MSDS (866-427-6737 Toll Free - North America) email: bpcares@bp.com		

## Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) SYNTHETIC LUBRICANT (POLYOL ESTER BASE)		60-100	<b>ACGIH (United States).</b> TWA: 5 mg/m <sup>3</sup> Form: OIL MIST, MINERAL STEL: 10 mg/m <sup>3</sup> Form: OIL MIST, MINERAL <b>OSHA (United States).</b> PEL: 5 mg/m <sup>3</sup> Period: 8 hour(s). Form: OIL MIST, MINERAL
2) Proprietary performance additives			None assigned.

## Section 3. Hazards Identification

<b>Physical state</b>	Liquid.
<b>Color</b>	Amber.
<b>Emergency Overview</b>	This product has been evaluated and does not require any hazard warning on the label under established regulatory criteria.

### POTENTIAL HEALTH EFFECTS

<i>Eyes</i>	Slightly irritating to the eyes.
<i>Skin</i>	No significant health hazards identified.
<i>Inhalation</i>	No significant health hazards identified.
<i>Ingestion</i>	No significant health hazards identified.

See Toxicological Information (section 11)

## Section 4. First Aid Measures

<b>Eye Contact</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs. Accidental high pressure injection through the skin requires immediate medical attention.
<b>Inhalation</b>	If inhaled, remove to fresh air. Get medical attention if symptoms appear.

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**Ingestion** Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

### Section 5. Fire Fighting Measures

**Flammability of the Product** May be combustible at high temperature.

**Autoignition Temperature** >250°C (482°F)

**Flash Points** CLOSED CUP: >210°C (410°F).

**Flammable Limits** Not available.

**Products of Combustion** carbon oxides (CO, CO<sub>2</sub>). When heated to decomposition it emits irritating fumes.

**Unusual fire/explosion hazards** None identified.  
This material is not explosive as defined by established regulatory criteria.

**Fire Fighting Media and Instructions** SMALL FIRE: Use DRY chemical powder.  
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

**Protective Clothing (Fire)** Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.

### Section 6. Accidental Release Measures

**Large Spill and Leak** Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (Section 8). Follow all fire fighting procedures (Section 5).

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion proof means to transfer material to a sealed, appropriate container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Minimize contact of spilled material with soils to prevent runoff to surface waterways.

### Section 7. Handling and Storage

**Handling** Avoid breathing vapors or spray mists. Do not ingest. Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

**Storage** Keep container tightly closed. Keep container in a cool, well-ventilated area.

### Section 8. Exposure Controls, Personal Protection

**Engineering Controls** Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### Personal Protection

**Eyes** Safety glasses with side shields.

**Skin and Body** Avoid prolonged or repeated contact with skin. Wear protective clothing if prolonged or repeated contact is likely.

**Respiratory** None required; however, use of adequate ventilation is good industrial practice. If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter.

**Hands** Wear protective gloves if prolonged or repeated contact is likely.

#### Chemical name

1) SYNTHETIC LUBRICANT (POLYOL ESTER BASE)

#### Exposure Limits

##### ACGIH (United States).

TWA: 5 mg/m<sup>3</sup> Form: OIL MIST, MINERAL

STEL: 10 mg/m<sup>3</sup> Form: OIL MIST, MINERAL

##### OSHA (United States).

PEL: 5 mg/m<sup>3</sup> Period: 8 hour(s). Form: OIL MIST, MINERAL

Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state</b>	Liquid.	<b>Odor</b>	Bland.
<b>pH</b>	Not applicable.	<b>Color</b>	Amber.
<b>Boiling/Condensation Point</b>	Not available.		
<b>Melting/Freezing Point</b>	Not available.		
<b>Pour Point</b>	-40 C (-40 F)		
<b>Specific Gravity</b>	0.91 (Water = 1)		
<b>Vapor Pressure</b>	negligible		
<b>Vapor Density</b>	>1 (Air = 1)		
<b>Odor Threshold</b>	Not available.		
<b>Evaporation Rate</b>	negligible		
<b>Viscosity</b>	Kinematic (40C): 46 cSt		
<b>LogK<sub>ow</sub></b>	Not available.		
<b>Solubility</b>	Insoluble in cold water.		

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Conditions to avoid</b>	Keep away from heat, sparks and flame. Keep away from sources of ignition. Temperature > 1 5 0 °C
<b>Incompatibility with Various Substances</b>	Strong oxidizing materials, strong acids, strong alkalis.
<b>Hazardous Decomposition Products</b>	Products of Combustion:carbon oxides (CO, CO <sub>2</sub> ). When heated to decomposition it emits irritating fumes.
<b>Hazardous Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Acute toxicity</b>	LD50: Not available. LC50: Not available.
<b>Chronic toxicity</b>	Repeated or prolonged skin contact may lead to skin disorders.  No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC). No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program (NTP) or the U.S. Occupational Safety and Health Act (OSHA).
<b>Other information</b>	No significant health hazards identified.

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Ecological testing has not been conducted on this product by BP.
<b>Persistence Potential</b>	This product is inherently biodegradable.
<b>Bioaccumulative potential</b>	This product is not expected to bioaccumulate through food chains in the environment.

**Section 13. Disposal Considerations**

<b>Waste Information</b>	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
<b>Consult your local or regional authorities.</b>	

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**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

Not regulated.

**Marine Pollutant** Not pollutant.

**Special Provisions for Transport** None identified.

**ADR/RID Classification**

**UN number** Not applicable.

**Proper shipping name** Not regulated.

**ADR/RID Class** Not applicable.

**Packing Group** Not applicable.

**IMO/IMDG Classification**

**Proper shipping name** Not regulated.

**IMDG Class** Not applicable.

**UN number** Not applicable.

**Packing Group** Not regulated.

**Marine Pollutant** Not pollutant.

**ICAO/IATA Classification**

**Proper shipping name** Not regulated.

**IATA Class** Not applicable.

**UN number** Not applicable.

**Packing Group** Not applicable.

**Section 15. Regulatory Information**

**U.S. Regulations** US INVENTORY (TSCA): Listed on inventory.  
SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Part 355):: This product is not regulated under Section 302 of SARA and 40 CFR Part 355.  
SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370):: Defined as non-hazardous by OSHA under 29 CFR 1910.1200(d).  
SARA 313 toxic chemical notification and release reporting:No products were found.  
CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: This material is not regulated under CERCLA Sections 103 and 107.

**State Regulations** No products were found.  
California prop. 65: No products were found.

**Other Regulations** AUSTRALIAN INVENTORY (AICS): Not determined.  
CANADA INVENTORY (DSL): Not determined.  
CHINA INVENTORY (IECS): Not determined.  
EC INVENTORY (EINECS/ELINCS): In compliance.  
JAPAN INVENTORY (ENCS): Not determined.  
KOREA INVENTORY (ECL): Not determined.  
PHILIPPINE INVENTORY (PICCS): Not determined.

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**Section 16. Other Information**

This product has been evaluated and does not require any hazard warning on the label under established regulatory criteria.

**Hazardous Material Information System (U.S.A.)**

Health	1
Fire Hazard	1
Reactivity	0

**National Fire Protection Association (U.S.A.)**



**HISTORY**

**Date of issue** 3/8/2002.  
**Version** 1  
**Prepared by** Product Stewardship

**Notice to Reader**

*NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product. This Material Safety Data Sheet conforms to the requirements of ANSI Z400.1.*