



Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	OPTIMOL LONGTIME PD 1	Code
Supplier	CASTROL INDUSTRIAL NORTH AMERICA INC. 1001 WEST 31ST STREET DOWNTOWN GROVE, IL 60515-1280 Product Information: 630 241-4000	Validation Date 8/20/2001.
Synonym	Not available.	Print Date 8/20/2001.
Trade name	Not available.	Responsible Name Product Stewardship & Toxicology
Material Uses	See Product Data Sheet.	In Case of Emergency CHEMTRAC (800) 424-9300
Manufacturer	CASTROL INDUSTRIAL NORTH AMERICA INC 1001 WEST 31ST STREET DOWNTOWN GROVE, IL 60515-1280	

Section 2. Composition, Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	40-45	ACGIH (United States). TWA: 5 mg/m ³ Form: Mist ACGIH (United States). STEL: 10 mg/m ³ Form: Mist
2) DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC	64741-88-4	35-40	ACGIH (United States). TWA: 5 mg/m ³ Form: Mist OSHA (United States). TWA: 5 mg/m ³ Form: Mist ACGIH (United States). STEL: 10 mg/m ³ Form: Mist

Section 3. Hazards Identification

Physical State and Appearance	Liquid. (Red-brown/green grease)
Odor	Slight.
Color	Red. Brown. Green. Grease
Emergency Overview	<p>WARNING!</p> <p>MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.</p> <p>Wash thoroughly after handling. Avoid contact with eyes, skin and clothing. Wash clothing before reuse. Do not ingest. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.</p> <p>MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. Avoid breathing vapors of this product. Avoid contact with eyes, skin and clothing.</p>
Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects	May cause eye irritation. Oral LD50 not established. Do not ingest. TLV for product not established. Refer to Hazardous Materials List for ingredient TLV's. May cause skin irritation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not known to be carcinogen. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available.
Medical Conditions Aggravated by Overexposure:	Defatting to the skin. Repeated or prolonged contact with irritants may cause dermatitis.
Overexposure /Signs/Symptoms	Not available.

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See Toxicological Information (section 11)

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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. Loosen tight clothing such as a collar, tie, belt or waistband.
Notes to Physician	Not available.

Section 5. Fire Fighting Measures

Flammability of the Product	May be combustible at high temperature.
Autoignition Temperature	Not available.
Flash Points	CLOSED CUP: >200°C (392°F).
Flammable Limits	Not available.
Products of Combustion	Potential combustion products are oxides of carbon and sulfur, molybdenum, phosphorous and zinc.
Fire Hazards in Presence of Various Substances	Not available.
Explosion Hazards in Presence of Various Substances	Non-explosive in presence of open flames, sparks and static discharge, of shocks.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet. Carbon dioxide, dry chemical, foam. Wear self contained breathing apparatus when fire fighting in a confined space. Cool fire exposed containers with waterspray to prevent rupture.
Protective Clothing (Fire)	Be sure to use an approved/certified respirator or equivalent.
Special Remarks on Fire Hazards	Potential combustion products are oxides of carbon, sulfur, molybdenum, phosphorous and zinc.
Special Remarks on Explosion Hazards	Empty containers may contain toxic, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Do not allow to enter drains or watercourses.

Section 7. Handling and Storage

Avoid breathing vapors or spray mists.

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

Wash contaminated clothing before reuse. Do not take internally. Avoid contact with skin and eyes. Keep containers closed when not in use. Store in cool dry place. Bring product to room temperature prior to use.

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.

Good industrial hygiene practices recommend that engineering controls be used to reduce environmental concentrations to the threshold limit value (TLV) or permissible exposure limit (PEL), if applicable. If any associated TLV or PEL is exceeded, provide NIOSH approved respiratory protection.

Personal Protection

Eyes Safety glasses.

Body Lab coat.

Eyewash facility

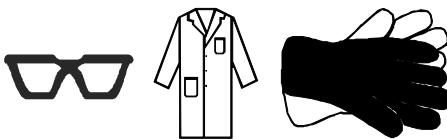
Respiratory Not applicable.

Hands

Chemical resistant gloves should be used when handling this product.

Feet Not applicable.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Product Name

Exposure Limits

1) DISTILLATES, PETROLEUM, HYDROTREATED HEAVY NAPHTHENIC

ACGIH (United States)

TWA: 5 mg/m³ Form: Mist

STEL: 10 mg/m³ Form: Mist

2) DISTILLATES, PETROLEUM, SOLVENT-REFINED HEAVY PARAFFINIC

ACGIH (United States)

TWA: 5 mg/m³ Form: Mist

TWA: 5 mg/m³ Form: Mist

STEL: 10 mg/m³ Form: Mist

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance Liquid. (Red-brown/green grease)

Odor Slight.

Boiling/Condensation Point Not available.

Taste Not available.

Melting/Freezing Point Not available.

Color Red. Brown. Green. Grease

pH Concentrate Not applicable.

pH Dilution % and Value Not applicable.

Critical Temperature Not available.

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Specific Gravity	0.9 (Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	Not available.		
Volatility	Not available.		
Odor Threshold	Not available.		
Evaporation Rate	Not available.		
VOC	Not available.	VOC Method	Not available.
Viscosity	Not available.		
Solubility	Insoluble in cold water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	None known.
Incompatibility with Various Substances	Strong oxidizing agents.
Hazardous Decomposition Products	Not available.
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Not known to be carcinogen. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available.
Other Toxic Effects on Humans	No specific information is available in our database regarding the other toxic effects of this material for humans.
Special Remarks on Toxicity to Animals	Not available.
Special Remarks	In case of contact, flush eyes with plenty of water. Get medical attention if irritation persists. If swallowed, call a physician immediately. Only induce vomiting at the instructions of a physician. Never give anything by mouth to an unconscious person. If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues. Wash skin with soap and water. If irritation occurs, get medical attention. Wash clothing before reuse.
Special Remarks on Other Toxic Effects on Humans	May cause eye irritation. Oral LD50 not established. Do not ingest. TLV for product not established. Refer to Hazardous Materials List for ingredient TLV's. May cause skin irritation.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available.
Products of Degradation	Potential combustion products are oxides of carbon and sulfur, molybdenum, phosphorous, and zinc.
Toxicity of the Products of Biodegradation	Not available.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Information	Waste must be disposed of in accordance with federal, state and local environmental control regulations. Spills should be contained, absorbed and placed in suitable containers for disposal. Do not discharge into waterways or sewer systems. Dispose of in accordance with local, state and federal regulations. Disposal of this material to the land may be banned by federal law (40 CFR 268).
RCRA Waste Code(s)	USED OIL
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	Not regulated.	
	Not regulated.	
Marine Pollutant	Not pollutant.	
Special Provisions for Transport	Petroleum oil, not regulated in containers less than 3500 gallons.	
ADR/RID Classification	Not available.	
IMO/IMDG Classification	Not available.	
ICAO/IATA Classification	Not available.	

Section 15. Regulatory Information

HCS Classification	HCS Class: Irritating substance.
U.S. Federal Regulations	<p>SARA 302/304 emergency planning and notification: No products were found.</p> <p>SARA 311/312 MSDS distribution - chemical inventory - hazard identification: OPTIMOL LONGTIME PD 1: immediate health hazard.</p> <p>SARA 313 toxic chemical notification and release reporting: PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS 1%</p>

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Clean Water Act (CWA) 307: No products were found.
 Clean Water Act (CWA) 311: No products were found.
 Clean air act (CAA) 112 accidental release prevention: No products were found.
 Clean air act (CAA) 112 regulated toxic substances: No products were found.
 Clean air act (CAA) 112 regulated flammable substances: No products were found.

State Regulations	No products were found. California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer, birth defects or other reproductive harm, which would require a warning under the statute: PHOSPHORODITHIOIC ACID, O,O-DI-C1-14-ALKYL ESTERS, ZINC SALTS
Inventory Lists	TSCA 8(b) inventory: One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. CEPA DSL: One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. Australia (NICNAS): One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. Korea (TCCL): One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. Philippines (RA6969): One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. MITI: One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information. EINECS: One or more of the materials contained in this product may not appear on the applicable inventory list. Please consult the manufacturer for additional information.

Section 16. Other Information

Label Requirements	MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.										
Hazardous Material Information System (U.S.A.)	<table border="1"> <tr> <td>Health</td> <td>1</td> </tr> <tr> <td>Fire Hazard</td> <td>1</td> </tr> <tr> <td>Reactivity</td> <td>0</td> </tr> <tr> <td>Personal Protection</td> <td>C</td> </tr> </table>	Health	1	Fire Hazard	1	Reactivity	0	Personal Protection	C	National Fire Protection Association (U.S.A.)	
Health	1										
Fire Hazard	1										
Reactivity	0										
Personal Protection	C										
References	Not available.										
Other Special Considerations	PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section II are classified by the supplier as severely processed. Not all those listed in Section II may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200. No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.										

Validated by Larry J. Bader-CINA on 8/20/2001.

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CHEMTREC (800) 424-9300

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Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.