

# Precision Product MSDS Number 207-6117K

Prepared according to 29CFR 1910.1200.

<b>1</b>	<b>Chemical Product and Company Identification</b>
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*Mercury Marine  
W6250 W. Pioneer Rd.  
Fond du Lac, WI54935  
Tel: (920) 929-5000*

**Product Trade Name** 2 Cycle Outboard Oil – JP5 Fuel  
**CAS Number** Not applicable for mixtures.  
**Synonyms** None.  
**Generic Chemical Name** Mixture.  
**Product Type** Multipurpose.  
**Preparation/Revision Date** 12 April 2008  
**Transportation Emergency Phone No.** FOR TRANSPORT EMERGENCY call CHEMTREC: (+1) 703-527-3887 (outside the U.S.), 1-800-424-9300 (in the U.S.) For Information call Mercury Marine (920) 929-5000  
**Part No(s).** 92-858093A01, 92-858092A01

<b>2</b>	<b>Hazards Identification</b>
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**Appearance** Clear amber liquid.  
**Odor** Mild kerosene  
**Principal Hazards** WARNING.  
HARMFUL IF INHALED.  
COMBUSTIBLE LIQUID.  
MAY CAUSE EYE IRRITATION.  
MAY CAUSE SKIN IRRITATION.  
MAY CAUSE RESPIRATORY TRACT IRRITATION  
MAY CAUSE CHRONIC HEALTH EFFECTS.  
**Target Organs:** Bone marrow, Central nervous system, Kidney, Liver

See Section 11 for complete health hazard information.

<b>3</b>	<b>Composition/Information on Ingredients</b>
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### Hazardous Ingredients

Comp	CAS No.	Percentage (by wt.)	Carcinogen
Kerosene	64742-81-0	From 30 to 39.9 percent	N/E

(N/E) - None established

<b>4</b>	<b>First Aid Measures</b>
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<b>Eyes</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
<b>Skin</b>	Wash with soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.
<b>Inhalation</b>	Remove to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If breathing has stopped, apply artificial respiration. If irritation persists or if toxic symptoms are observed, get medical attention.
<b>Oral</b>	DO NOT INDUCE VOMITING. Get immediate medical attention.
<b>Additional Information</b>	Get medical attention advice if you feel unwell.

<b>5</b>	<b>Fire Fighting Measures</b>
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<b>Flash Point</b>	63 °C, 145.4 °F PMCC (Typical)
<b>Extinguishing Media</b>	CO2, dry chemical, or foam. Water can be used to cool and protect exposed material.
<b>Firefighting Procedures</b>	Recommend wearing self-contained breathing apparatus. Water may cause splattering. Use water to cool containers exposed to fire.
<b>Unusual Fire &amp; Explosion Hazards</b>	Vapors may be heavier than air and may travel along the ground to a distant ignition source and flash back. Container may rupture on heating.

<b>6</b>	<b>Accidental Release Measures</b>
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<b>Spill Procedures</b>	Evacuate all non-essential personnel. Personal Protective Equipment must be worn, see Personal Protection Section for PPE recommendations. Remove sources of ignition. Ventilate spill area. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free liquid for recycle and/or disposal. Residue liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.
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<b>7</b>	<b>Handling and Storage</b>
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<b>Pumping Temperature</b>	Ambient
<b>Maximum Handling Temperature</b>	45 °C, 113 °F
<b>Handling Procedures</b>	Keep material away from heat, sparks, pilot lights, static electricity and open flame. Keep containers closed when not in use. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Do not breath dust, fume, gas, mist, vapors or spray. Use only outdoors or in a well-ventilated area. Wash thoroughly after handling. Empty containers retain material residue. Do not cut, weld, braze, solder, drill, grind or expose containers to heat, flame, spark or other sources of ignition.
<b>Maximum Storage Temperature</b>	Not determined.
<b>Storage Procedures</b>	Do not store near potential sources of ignition. Store in well ventilated place. Store in a cool, dry location. Keep container tightly closed.
<b>Loading Temperature</b>	Not determined.

<b>8</b>	<b>Exposure Controls/Personal Protection</b>
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**Exposure Limits**

	Exposure Guidelines		
	OSHA	ACGIH	Other

Comp	TWA	STEL	TWA	STEL	TWA	STEL
Kerosene	N/E	N/E	200 mg/cu. M (s)	N/E	N/E	N/E

- (s) - Skin exposure
- (p) - Proposed limit
- (c) - Ceiling exposure
- (l) - Recommended exposure limit
- (u) - Supplier recommended exposure limit
- (N/E) - None established

<b>Other Exposure Limits</b>	Contains mineral oil. Under conditions which may generate mists, observe the OSHA PEL of 5 mg per cubic meter, ACGIH STEL of 10 mg per cubic meter.
<b>Engineering Controls</b>	Use material in well ventilated area only. Additional ventilation or exhaust may be required to maintain air concentrations below recommended exposure limits.
<b>Gloves Procedures</b>	Neoprene.
<b>Eye Protection</b>	Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.
<b>Respiratory Protection</b>	Use NIOSH/MSHA approved full face respirator with a combination organic vapor and high efficiency filter cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and for large spill clean-up sites. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.
<b>Clothing Recommendation</b>	Long sleeve shirt is recommended. Wear either a chemical protective suit or apron when potential for contact with material exists. Do not wear rings, watches or similar apparel that could entrap the material and cause a skin reaction. Launder contaminated clothing before reuse.

<b>9</b>	<b>Physical and Chemical Properties</b>
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<b>Flash Point</b>	63 °C, 145.4 °F PMCC (Typical)
<b>Upper Flammable Limit</b>	Not determined.
<b>Lower Flammable Limit</b>	Not determined.
<b>Autoignition Point</b>	Not determined.
<b>Explosion Data</b>	Material does not have explosive properties.
<b>Vapor Pressure</b>	Not determined.
<b>pH</b>	Not determined.
<b>Specific Gravity</b>	0.89 (15.6 °C)
<b>Bulk Density</b>	Not determined.
<b>Water Solubility</b>	Insoluble.
<b>Percent Solid</b>	Not determined.
<b>Percent Volatile</b>	Unknown.
<b>Volatile Organic Compound</b>	Not determined.
<b>Vapor Density</b>	Not determined.
<b>Evaporation Rate</b>	Not determined.
<b>Odor</b>	Mild kerosene
<b>Appearance</b>	Clear amber liquid.
<b>Viscosity</b>	55 Centistokes (40 °C) 10 Centistokes (100 °C)
<b>Odor Threshold</b>	Unknown.
<b>Boiling Point</b>	Not determined.
<b>Pour Point Temperature</b>	-48 °C, -54 °F
<b>Melting / Freezing Point</b>	Not determined.

*The above data are typical values and do not constitute a specification. Vapor pressure data are calculated unless otherwise noted.*

<b>10</b>	<b>Stability and Reactivity</b>
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<b>Stability</b>	Material is normally stable at moderately elevated temperatures and pressures.
<b>Decomposition Temperature</b>	Not determined.
<b>Incompatibility</b>	Strong acids. Strong bases. Oxidizing agents.
<b>Polymerization</b>	Will not occur.
<b>Thermal Decomposition</b>	Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion.
<b>Conditions to Avoid</b>	Not determined.

<b>11</b>	<b>Toxicological Information</b>
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**-- ACUTE EXPOSURE --**

<b>Eye Irritation</b>	Weak to moderate eye irritant. Does not meet Canadian D2B or EU R36 criteria. Based on data from components and similar materials.
<b>Skin Irritation</b>	May cause skin irritation. Based on data from components or similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.
<b>Respiratory Irritation</b>	May cause nose, throat and lung irritation. Based on data from components or similar materials.
<b>Dermal Toxicity</b>	The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.
<b>Inhalation Toxicity</b>	High concentrations may cause headaches, dizziness, nausea, behavioral changes, weakness, drowsiness and stupor.
<b>Oral Toxicity</b>	The LD50 in rats is > 5000 mg/kg. Based on data from components or similar materials.
<b>Dermal Sensitization</b>	No data available to indicate product or components may be a skin sensitizer.
<b>Inhalation Sensitization</b>	No data available to indicate product or components may be respiratory sensitizers.

**-- CHRONIC EXPOSURE --**

<b>Chronic Toxicity</b>	Prolonged and repeated overexposure to kerosene and similar petroleum distillates may cause degenerative changes in the liver, kidneys, and bone marrow.
<b>Carcinogenicity</b>	Lifetime skin painting studies with products similar to kerosene have produced skin tumors or skin cancer in laboratory mice. The degree of carcinogenic response was weak to moderate with a relatively long latent period. Limited studies on carcinogenic oils have shown that washing the animal's skin with soap and water between applications greatly reduces tumor formation. This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.
<b>Mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Reproductive Toxicity</b>	No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.
<b>Teratogenicity</b>	No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

**-- ADDITIONAL INFORMATION --**

<b>Other</b>	No other health hazards known.
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**-- ENVIRONMENTAL TOXICITY --**

<b>Freshwater Fish Toxicity</b>	Not determined.
<b>Freshwater Invertebrates Toxicity</b>	Not determined.
<b>Algal Inhibition</b>	Not determined.
<b>Saltwater Fish Toxicity</b>	Not determined.
<b>Saltwater Invertebrates Toxicity</b>	Not determined.
<b>Bacteria Toxicity</b>	Not determined.
<b>Miscellaneous Toxicity</b>	Not determined.

**-- ENVIRONMENTAL FATE --**

<b>Biodegradation</b>	At least 25% of the components in this product show limited biodegradation based on OECD 301-type test data. At least 25% of the components in this product show limited biodegradation based on OECD 302-type test data.
<b>Bioaccumulation</b>	Less than 1.0% of the components potentially bioconcentrate, based on octanol/water coefficients.
<b>Soil Mobility</b>	Not determined.

<b>Waste Disposal</b>	This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261.
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<b>ICAO/IATA (US)</b>	Not regulated.
<b>ICAO/IATA (International)</b>	Not regulated.
<b>IMDG</b>	Not regulated.
<b>IMDG EMS Fire</b>	Not applicable.
<b>IMDG EMS Spill</b>	Not applicable.
<b>IMDG MFAG</b>	Not applicable.
<b>IMO Marine Vessel</b>	DO NOT TRANSPORT - ADDITIONAL INFORMATION REQUIRED
<b>U.S. Barge</b>	DO NOT TRANSPORT - ADDITIONAL INFORMATION REQUIRED
<b>USCG Compatibility</b>	Not determined.
<b>U.S. DOT Bulk</b>	UN1223 Kerosene Class Combustible Liquid, PG III, RQ (Naphthalene)
<b>U.S. DOT Non-Bulk</b>	Not regulated.
<b>DOT NAERG</b>	128
<b>TDG Bulk</b>	Not regulated.
<b>TDG Non-Bulk</b>	Not regulated.
<b>Mexico</b>	Not regulated.
<b>Mexico Non-Bulk</b>	Not regulated.
<b>Bulk Quantity</b>	85000 liters, 22457 gal.
<b>Non-Bulk Quantity</b>	207.8 liters, 55 gal.

*Review classification requirements before shipping materials at elevated temperatures.*

**-- Global Chemical Inventories --**

<b>USA</b>	All components of this material are on the US TSCA Inventory or are exempt.
<b>Other TSCA Reg.</b>	None known.
<b>EU</b>	All components are in compliance with the EC Seventh amendment Directive 92 /32/EEC.
<b>Japan</b>	This product requires notification in Japan.
<b>Australia</b>	This product requires notification before sale in Australia.
<b>Canada</b>	All components are in compliance with the Canadian Environmental Protection Act and are present on the Domestic Substances List.
<b>Switzerland</b>	All components are in compliance with the Environmentally Hazardous Substances Ordinance in Switzerland.
<b>Korea</b>	This product requires notification before sale in Korea.
<b>Philippines</b>	All components are in compliance with the Philippines Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990 (R.A. 6969).
<b>China</b>	This product requires notification in China.

**-- Other U.S. Federal Regulations --**

<b>SARA Ext. Haz. Subst.</b>	This product does not contain greater than 1.0% of any chemical substance on the SARA Extremely Hazardous Substances list.
<b>SARA Section 313</b>	This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) of any chemical substances listed under SARA Section 313.

**SARA 311 Classifications**

Acute Hazard	Yes
Chronic Hazard	Yes
Fire Hazard	Yes
Reactivity Hazard	No

**CERCLA Hazardous Substances****Transit Reportable Quantities**

Component	Reportable Quantity RQ	Units	Reportable Quantity RQ	Units
Naphthalene	17432	gal.	65980	liters

<b>FDA Approval</b>	Not applicable.
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**-- State Regulations --**

<b>Cal. Prop. 65</b>	This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: < 1 ppm Benzene, CAS no. 71-43-2 774 ppm Naphthalene, CAS no. 91-20-3
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**-- Product Registrations --**

<b>U.S. Fuel Registration</b>	Not applicable.
<b>U.S. Dept of Agriculture NSF Nonfood Compounds Registration</b>	This product has not been filed with the USDA to support H2 approvals. This product has not been filed with the NSF to support H1 or H2 approvals.
<b>Finnish Registration Number</b>	Not Registered
<b>Swedish Registration Number</b>	Not Registered
<b>Norwegian Registration</b>	Not Registered

**Number**

**Danish Registration Number** Not Registered

**Swiss Registration Number** Not Registered

**Italian Registration Number** Not Registered

**Korean Registration Number** Not Registered

**-- Other / International --**

**TDG Regulated Limit.** None known.

<b>16</b>	<b>Other Information</b>
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**US NFPA Codes**

Health	Fire	Reactivity	Special
2	2	0	N/E

(N/E) - None established

**HMIS Codes**

Health	Fire	Reactivity
2*	2	0

**Precautionary Labels**

WARNING.

HARMFUL IF INHALED.  
 COMBUSTIBLE LIQUID.  
 MAY CAUSE EYE IRRITATION.  
 MAY CAUSE SKIN IRRITATION.  
 MAY CAUSE RESPIRATORY TRACT IRRITATION  
 MAY CAUSE CHRONIC HEALTH EFFECTS.

**Revision Indicators**

This MSDS has no revisions since 12 April 2008

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