

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Identifier: MSDS # 201-6111</b>		<b>Part # and Package Size:</b>	
<b>Mercury Marine Precison Parts Fuel Injector Cleaner</b>		Part #: 92-859631K01 Package Size: 6x16 FL OZ	
<b>Product Use:</b> For professional use – to be used with Mercury tool			
<b>Manufacturer's Name:</b> Mercury Marine		<b>Supplier's Name</b> Same as Manufacturer	
<b>Street Address:</b> W6250 W. Pioneer Rd., PO Box 1939			
<b>City:</b> Fond du Lac	<b>State:</b> WI		
<b>Zip Code:</b> 54936-1939	<b>Emergency Telephone</b> 800 424 9300 (CHEMTREC)	<b>Technical Contact</b> (920) 929-5000	
<b>Date MSDS Prepared &amp; Revision #</b> April 2, 2007, First Issue			

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Ingredients <i>(specific)</i>	%	CAS Number	LD <sub>50</sub> of Ingredient <i>(specify species and route)</i>	LC <sub>50</sub> of Ingredient <i>(specify species)</i>
Xylene	55-65	1330-20-7	4,300 mg/kg –oral-rat >1,700 mg/kg – skin-rat	5,000 ppm/4H- inhalation-rat
Isopropanol	26-34	67-63-0	4,420 mg/kg – oral-rat 13,000 mg/kg – skin-rabbit	16,970 ppm/4H – inhalation-rat
Diacetone Alcohol	7-12	123-42-2	4,000 mg/kg – oral-rat 13,500 mg/kg – skin-rabbit	>1,500 ppm/8H – inhalation-rat

## SECTION 3 - HAZARDS IDENTIFICATION


<b>Route of Entry</b> <input checked="" type="checkbox"/> Skin Contact <input checked="" type="checkbox"/> Skin Absorption <input checked="" type="checkbox"/> Eye Contact <input checked="" type="checkbox"/> Inhalation <input checked="" type="checkbox"/> Ingestion
<b>Emergency Overview</b> <b>Flammable liquid and vapor, keep away from sources of ignition, combustibles, oxidizing materials and acid. Store in an area equipped with automatic sprinklers or fire extinguishing system. Since empty containers contain product residues; assume emptied containers to have same hazards as full containers. Harmful or fatal if swallowed, Vapor Harmful. Eye and skin irritant.</b>
<b>Potential Health Effects</b> <b>Effects on Eyes: Irritant</b> <b>Effects on Skin: Prolonged or repeated skin contact may cause dermatitis, scaling and possible systematic effects.</b> <b>Effects Due to Ingestion: Low level of toxicity, small amounts of liquid aspirated into the respiratory system during ingestion may cause pulmonary edema.</b> <b>Effects Due to Inhalation: Narcotic chemical affecting central nervous system resulting in: dizziness, nausea, visual impairment, narcosis and muscular impairment.</b>

## SECTION 4 - FIRST AID MEASURES

<b>Skin Contact</b> If the product contacts the skin, promptly wash the contaminated skin with soap and water for at least 15 minutes. If this product penetrates the clothing, promptly remove the clothing and wash the skin with soap and water. Systematic effects may be delayed 18 to 72 hours, therefore keep individuals under observation.
<b>Eye Contact</b> If the product contacts the eyes, immediately wash the eyes with large quantities of room temperature water for at least 15 minutes, occasionally lifting the lower and upper lids. Get medical attention immediately. A follow up visit to an ophthalmologist should be made. Do not wear contact lenses when working with this chemical.
<b>Inhalation</b> Move the exposed person to fresh air at once and call emergency medical care. If breathing has stopped, give artificial respiration. If breathing is difficult, give humidified oxygen
<b>Ingestion</b> If this product is ingested, DO NOT INDUCE VOMITING. Get immediate medical attention.

**Product Identifier**  
 Mercury Marine Fuel Injector Cleaner, **Part #: 92-859631K01, MSDS 201-6111**

**SECTION 5 - FIRE FIGHTING MEASURES**

<b>Flammability</b> Flammable <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<b>If yes, under which conditions?</b> Sources of spark, heat, flame and high temperature
<b>Means of Extinction</b> Use carbon dioxide extinguishers or alcohol foam for small fires. Water spray or fog can cool fire but may not be effective in extinguishing fire. Large fires should be extinguished with alcohol foam. Use water spray to cool containers exposed to fire. Containers may explode in heat or fire.		
<b>Flashpoint (°C) and Method</b> 54° F (12.2° C) - TOC	<b>Upper Flammable Limit (% by volume)</b> 1.0	<b>Lower Flammable Limit (% by volume)</b> 7.0
<b>Autoignition Temperature (°C)</b> Data Not Available	<b>Explosion Data – Sensitivity to Impact</b> Not known	<b>Explosion Data – Sensitivity to Static Discharge</b> Yes – keep away from static discharge
<b>Hazardous Combustion Products</b> Excessive heating and/or incomplete combustion will produce carbon monoxide		
 <p><b>[NFPA]</b>          Fire Hazard: 3, Health Hazard: 2, Reactivity: 0</p>		

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

<b>Leak and Spill Procedures</b> SMALL SPILL: Eliminate all ignition sources (e.g. sparks, open flames, hot surfaces)., provide adequate ventilation, contain leak using absorbent, inert, non-combustible material. LARGE SPILL: Contain spill, transfer to secure containers. In the event of an uncontrolled material release, the user should determine if release is reportable under applicable laws and regulations.
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**SECTION 7 - HANDLING AND STORAGE**

<b>Handling Procedures and Equipment</b> Keep away from heat, sparks, or flame. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, the metal containers should be grounded and bonded. Do not breathe vapour or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product. Practice good housekeeping. Maintain handling equipment in good, operating condition. Comply with applicable regulations.
<b>Storage Requirements</b> Keep container tightly closed when not in use and during transport. Do not pressurize, cut weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition; containers may explode and cause injury of death. Take similar precautions for the empty containers. Empty product containers may retain product residue and can be dangerous. These can increase the risk of fire and explosion. Do not use with incompatible materials such as strong oxidizing agents (e.g. peroxides, nitrates and perchlorates).

**SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION**

<b>Exposure Limits</b> OSHA PEL Xylene: 100 ppm (435 mg/m3) Isopropanol: 400 ppm (980 mg/m3) Diacetone Alcohol 50 ppm (240 mg/m3)
<b>Specific Engineering Controls</b> (such as ventilation, enclosed process) Local Exhaust: Provide local ventilation to maintain exposure levels below recommended exposure limits. Mechanical (General): In confined spaces mechanical ventilation may be required.
<b>Personal Protective Equipment</b> <input checked="" type="checkbox"/> Gloves <input checked="" type="checkbox"/> Respirator <input checked="" type="checkbox"/> Eye <input type="checkbox"/> Footwear <input checked="" type="checkbox"/> Clothing <input type="checkbox"/> Other
<b>If checked, specify type</b> Gloves: Use natural rubber or neoprene gloves as required.
Respirator: Do not use air purifying respirator. Use appropriate NIOSH approved supplied or self contained respirator. Respirators must be selected based on the airborne levels found in the workplace and must not exceed the working limits of the respirator.
Eye: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.
Clothing: If there is a possibility of exposure of an individual's body to the product, wear body-covering work clothes to avoid prolonged or repeated Work/Hygiene Practices: Use normal hygiene practices. Wash thoroughly with soap and water after handling product and before eating, drinking or using tobacco products. Clean affected clothing, shoes, and/or protective equipment before use and if it is not possible to clean them thoroughly; discard them.

<b>Product Identifier</b> Mercury Marine Fuel Injector Cleaner, <b>Part #: 92-859631K01</b>
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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State</b> Liquid	<b>Odour and Appearance</b> Colourless liquid with aromatic odour	<b>Odour Threshold (ppm)</b>
<b>Specific Gravity</b> 0.860	<b>Vapour Density (air = 1)</b> >1.0	<b>Vapour Pressure (mmHg)</b> Data not available for mixture
<b>Evaporation Rate</b> Data not available for mixture	<b>Boiling Point</b> 160 <sup>0</sup> F (71.1 <sup>0</sup> C)	<b>Freezing Point (°C)</b> Data not available for mixture
<b>pH</b> Not Applicable	<b>Coefficient of Water/Oil Distribution</b> Not applicable	<b>Solubility in Water</b> Partial

**SECTION 10 - STABILITY AND REACTIVITY**

<b>Chemical Stability</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If no, under which conditions?</b> The product is stable under normal conditions. Avoid heat, sparks, or flame
<b>Incompatibility with Other Substances</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, which ones?</b> Strong oxidizing agents, amines, chlorinated compounds and caustic materials
<b>Reactivity, and under what conditions?</b> The product is stable under normal conditions. Hazardous polymerization is not known to occur.	
<b>Hazardous Decomposition Products</b> Excessive heating and/or incomplete combustion will produce carbon monoxide and unidentified organic compounds.	

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<b>Effects on Eyes</b> Irritant	
<b>Effects on Skin</b> Prolonged or repeated skin contact may cause dermatitis, scaling and possible systematic effects.	
<b>Effects Due to Ingestion</b> Small amounts of liquid aspirated into the respiratory system during ingestion may cause pulmonary edema. May cause irritation of the digestive tract. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal.	
<b>Effects Due to Inhalation</b> Causes respiratory tract irritation. The product is a narcotic chemical affecting central nervous system resulting in: dizziness, nausea, visual impairment, narcosis, muscular impairment and possible death.	
<b>Effects Due to Chronic Exposure</b> Chronic exposure to xylene may cause defatting dermatitis, reversible eye damage, dyspnea (labored breathing), confusion, dizziness, apprehension, memory loss, headache, tremors, weakness, anorexia, nausea, ringing in the ears, irritability, thirst, mild changes in liver function, kidney impairment, anemia, and hyperplasia, but not destruction, of the bone marrow.	
<b>Irritancy of Product</b> The product is eye and skin irritant	
<b>Skin Sensitization</b> Causes dermatitis	<b>Respiratory Sensitization</b> Causes respiratory tract irritation
<b>Carcinogenicity - IARC</b> Group 3 (Not classifiable as to its carcinogenicity to humans)	<b>Carcinogenicity - ACGIH</b> No
<b>Reproductive Toxicity</b> May cause adverse reproductive and/or developmental effects. Pregnant women are at increased risk.	<b>Teratogenicity</b> Not known
<b>Embryotoxicity</b> May cause embryotoxicity at high exposure	<b>Mutagenicity</b> Not known
<b>Name of Synergistic Products/Effects</b> None specifically known	

**Product Identifier**Mercury Marine Fuel Injector Cleaner, **Part #: 92-859631K01, MSDS Prepared by: Vulsay Industries, Ltd****SECTION 12 - ECOLOGICAL INFORMATION****Xylene**

Ecotoxicity: Fish: Rainbow trout: LC50 = 13.5 mg/L; 96 Hr; UnspecifiedFish: Goldfish: LD50 = 13 mg/L; 24 Hr; UnspecifiedFish: Fathead Minnow: LC50 = 46 mg/L; 1 Hr; Static bioassay Acute and long-term toxicity to fish and invertebrates: LD50 for goldfish is 13 mg/L/24 Hr. Cas#1330-20-7: LC50(96Hr.) rainbow trout = 8.05 mg/L, Static condition; LC50(96Hr.) fathead minnow = 16.1 mg/L, flow-through conditions; LC50(96Hr.) bluegill = 16.1 mg/L, flow-through; EC50 (48 Hr.) water flea = 3.82 mg/L, flow-through conditions; EC50(24 Hr.) photobacterium phosphoreum = 0.0084 mg/L, Microtox test.

Environmental: In air, xylenes degrade by reacting with photochemically produced hydroxyl radicals. In soil it will volatilize and leach into groundwater. Little bioconcentration is expected.

Physical: ATMOSPHERIC FATE: According to a model of gas/particle partitioning of semivolatile organic compounds in the atmosphere, xylene, which has an experimental vapor pressure of 7.99 mm Hg at 25 deg C, will exist solely as a vapor in the ambient atmosphere. Vapor-phase xylene is degraded in the atmosphere by reaction with photochemically-produced hydroxyl radicals; the atmospheric lifetime of xylene is about 14-26 hours. Ambient levels of xylene are detected in the atmosphere due to large emissions of this compound.

Other: No information available.

**Isopropanol**

Ecotoxicity: Acute aquatic effects: Fathead minnow: LC50 = 1000 mg/L/96 Hr. Golden orfe: LC50 = 8970 mg/L/48 Hr. goldfish: LC50 = 5000 mg/L/24 Hr.

Environmental Fate: This chemical has a low potential to affect aquatic organisms, secondary waste treatment microorganisms, the germination and growth

of some plants. It is readily biodegradable and is not expected to persist in an aquatic environment. It is not likely to bioconcentrate and is not expected to have any adverse environmental impact.

Physical/Chemical: None

Other: No information available

**Diacetone Alcohol**

Ecotoxicity: This material is not expected to be toxic to aquatic life. The LC50/96-hour values for fish are over 100 mg/l.

Environmental Fate: When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material may leach into groundwater. When released into the soil, this material may evaporate to a moderate extent. When released into water, this material may biodegrade to a moderate extent. When released into water, this material is not expected to evaporate significantly. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into air, this material is expected to have a half-life between 10 and 30 days.

Other: No information available

**SECTION 13 - DISPOSAL CONSIDERATIONS****Waste Disposal**

Dispose of product in accordance with local, state, and federal regulations. Before attempting clean up, refer to other sections of MSDS for hazard warning information.

Precautions to Be Taken in Handling and Storing: See other sections of MSDS

Other Precautions: Product is flammable, handle accordingly.

**SECTION 14 - TRANSPORT INFORMATION****Special Shipping Information (CFR 49)**

Proper Shipping Name: Consumer Commodity, ORM-D

**Note: The transport information refers to the standard package size 6x16 FL OZ only.**

**PIN**

**TDG**

Consumer Commodity

**DOT**



Consumer Commodity, ORM-D

**IMO**

IMDG Shipping Name: Flammable Liquids, N.O.S. (Xylene, Isopropanol, Diacetone Alcohol), 3, UN1993, PGII, Ems#:3-07. LIMITED QUANTITY

**Product Identifier**  
Mercury Marine Fuel Injector Cleaner, **Part #: 92-859631K01, Original**

SECTION 15 - REGULATORY INFORMATION

<p><b>WHMIS CLASSIFICATION</b> B2, D2A, D2B</p>   <p>This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR</p>	<p><b>OSHA</b> Flammable liquid: Class 1B</p>
<p><b>SARA</b> Xylene 1330-20-7 Section 302: None, Section 304: None, Xylene: Section 311: Hazard Categories – Fire, Immediate (Acute) - Yes, Delayed(Chronic) - Yes Xylene: CIRCLA RQ-100 lbs. RCRA Code: U239, RQ-1000 lbs</p>	<p><b>TSCA</b> All substances are listed on the TSCA</p>

SECTION 16 - OTHER INFORMATION

<p><b>STATE</b> Xylene can be found on the following state right to know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.</p>
<p><b>European/International Regulations</b> European Labeling in Accordance with EC Directives Hazard Symbols: XN Risk Phrases: R 10 Flammable. R 20/21 Harmful by inhalation and in contact with skin. R 38 Irritating to skin. Safety Phrases: S 25 Avoid contact with eyes.</p>

*The recommendations and data presented herein are believed to be correct. However, no warranty is expressed or implied regarding the accuracy of the data or the results obtained from the use of this information or the use of product*