

**M.S.D.S.**  
**MATERIAL SAFETY DATA SHEET**

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Date Prepared: 08-01-00

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**SECTION 1 - PRODUCT IDENTIFICATION**

**Product Name:** 100%™ FUEL SYSTEM MAINTENANCE

**Chemical Name:** Mixture, fuel additive.

**Product Appearance:** Clear Low Viscosity Liquid

**Product Odor:** Mild petro-alcohol

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**SECTION 2 - INGREDIENTS/IDENTITY INFORMATION**

The criteria for listing components in the composition section is as follows: Carcinogens are listed when present at 0.1% or greater; components which are otherwise hazardous according to OSHA are listed when present at 1.0% or greater; nonhazardous components are listed at 3.0% or greater. This is not intended to be a complete compositional disclosure. Refer to section 14 for applicable states right to know and other regulatory information.

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Range in %</b>
Proprietary component		20.00-34.99
Polyalkenyl Phenol		10.00-19.99
Aromatic Solvent Naphtha		20.00-34.99
Polyolefin		3.00-9.99
Polyolefin Phenolic Amine		3.00-9.99
1,2,4 - Trimethylbenzene	95-63-6	3.00-9.99

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**SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS**

**Appearance:** Clear liquid. **Odor:** Aromatic/amine odor. **Boiling Point:** Not applicable. **Melting / Freezing point:** Not applicable. **Specific Gravity:** (water = 1): .9025. **Viscosity:** 20 cSt at 40.0 °C. **Vapor Density (air=1):** Not applicable. **Solubility in water (%):** Not applicable.

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**SECTION 4 - FIRE AND EXPLOSION HAZARD DATA**

**Ignition Temperature - AIT (degrees F):** Not applicable. **Flash Point (degrees F):** 144°F (60°C). **Flammable Limits (%):** Lower: Not determined. Upper: Not determined. **Recommended Fire Extinguishing Agents and Special Procedures:** Use water spray, dry chemical, foam or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. **Unusual or Explosive Hazards:** None. **Extinguishing Media Which Must Not Be Used:** Not determined. **Special Protective Equipment for Fire Fighters:** Wear full protective clothing and positive pressure breathing apparatus.

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**SECTION 5 - REACTIVITY DATA**

**This material reacts violently with:** Heat, Strong Oxidizers. **Products Evolved When Subjected to Heat or Combustion:** Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones. **Hazardous Polymerizations:** DO NOT OCCUR.

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**SECTION 6 - TOXICOLOGICAL INFORMATION**

**Appearance:** Clear liquid. **Odor:** Aromatic/amine odor. **CAUTION:** May cause dizziness and drowsiness. May cause eye irritation. Aspiration hazard if swallowed. Can enter lungs and cause damage. Combustible liquid and vapor. May cause liver damage based on animal data. May cause damage to blood-forming organs based on animal data. May cause blood effects based on animal data. Do not add nitrites - may form suspected cancer causing nitrosamines.

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**HMIS:** Health: 1. Flammability: 2. Reactivity: 0. **NFPA:** Health: 1. Flammability: 2. Reactivity: 0. **Potential Health Effects:** **Primary Route of Exposure:** Eye, skin, and inhalation. **Effects of Overexposure:** **Acute:** **Eyes:** may cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye. **Skin:** Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling. Other than the potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact. **Inhalation:** Vapors or mist, in excess of permissible concentrations, or in unusually high concentrations generated from spraying, heating the material or as from exposure in poorly ventilated areas or confined spaces, may cause irritation of the nose and throat, headache, nausea, and drowsiness. **Ingestion:** If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur. Aspiration may occur during swallowing or vomiting resulting in lung damage. **Sensitization Properties:** Unknown. **Chronic:** No adverse effects have been documented in humans as a result of chronic exposure. **Medical Conditions Aggravated by Exposure:** Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition). **Toxicological Information (Animal Toxicity Data):** **Median Lethal Dose, Oral:** LD50 Believed to be >5.00 g/kg (rat) practically nontoxic. **Inhalation:** Not determined. **Dermal:** LD50 believed to be >2.00 g/kg (rabbit) practically nontoxic. Irritation Index, Estimation of Irritation (Species) **Skin:** (Draize) Believed to be >.50 - 3.00 / 8.0 (rabbit) slightly irritating. **Eyes:** (Draize) Believed to be >15.00 - 25.00 /110 (rabbit) slightly irritating. **Sensitization:** Not determined.

**ADDITIONAL INFORMATION**

This product, or a component in this product, has been shown to damage red blood cells or blood forming organs, and has caused anemia in laboratory animals. This product, or a component of this product, has caused liver damage in laboratory animals.

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**SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE**

**Accidental Release Measures: Procedures in case of accidental release, breakage or leakage:** Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb on suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes or clothing. If more than 16,160 pounds of product is spilled, then report spill according to SARA 304 and/or CERCLA 102 (a) requirements, unless product qualifies for the petroleum exemption (CERCLA Section 101 (14)).

**Handling and Storage: Precautions to be taken in Handling:** Minimum feasible handling temperatures should be maintained. **Storage:** Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

**Waste Disposal Methods:** This product (as presently constituted) has the RCRA classification of benzene toxicity and ignitability. If discarded in its present form, it would have the hazardous waste numbers D018 and D001 respectively. Under RCRA, it is the responsibility of the user of the product to determine, at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may change the classification to non-hazardous, or hazardous for reasons other than, or in addition to benzene toxicity and ignitability.

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**SECTION 8 - EXPOSURE CONTROL MEASURES**

**Protective Equipment (Type): Eye/Face Protection:** Safety glasses, chemical type goggles, or face shield recommended to prevent eye contact. **Skin Protection:** Protective clothing such as coveralls or lab coats should be worn. Launder or dry-clean when soiled. Gloves and boots resistant to chemicals and petroleum distillates required.

**Respiratory Protection:** Airborne concentrations should be kept to lowest levels possible. If vapor, mist or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentration of the contaminant or oxygen content is unknown. Ventilation: Adequate to meet component occupational exposure limits. **Exposure Limit for Total Product:** None established for product; refer to section 6 for component exposure limits.

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**SECTION 9 - EMERGENCY FIRST AID PROCEDURES**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention. **Skin:** Wash skin with plenty of soap and water until all traces of material are removed. Remove and clean contaminated clothing. Destroy nonresistant footwear. Get medical attention if skin irritation persists or contact has been prolonged. **Ingestion:** If person is conscious and can swallow, give two glasses of water (16 oz.), but do not induce vomiting. If vomiting occurs, give fluids again. Have medical personnel determine if evacuation of stomach or induction of vomiting is necessary. Do not give anything by mouth to an unconscious or convulsing person. **Inhalation:** If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or respiratory irritation persists. **Other Instructions:** Aspiration of this product during induced emesis may result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Center for additional treatment information.

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**SECTION 10 - SPECIAL PRECAUTIONS**

**Handling Procedures:** Keep away from potential sources of ignition. Open container in a well ventilated area. Avoid breathing vapors. Keep containers closed when not in use. 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. **Storage Procedures:** Do not store near potential sources of ignition. Store in a well ventilated area.

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**SECTION 11 - TRANSPORTATION AND LABELING**

**DOT: Proper Shipping Name:** Combustible liquid, N.O.S. (kerosene, petroleum distillates). **Identification Number:** UN 1268. **Packing Group:** III. **Label Required:** None. **IMDG: Proper Shipping Name:** N/A. **ICAO: Proper Shipping Name:** N/A. **Hazard Class** 3A

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**SECTION 12 - ECOLOGICAL INFORMATION**

**Aquatic Toxicity:** Not determined. **Mobility:** Not determined. **Persistence and Biodegradability:** Not determined. **Potential to Bioaccumulate:** Not determined. **Remarks:** None.

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**SECTION 13 - REGULATORY INFORMATION**

**California Proposition 65:** The following detectable components of this product are substances, or belong to classes of substances, or belong to classes of substances, known to the State of California to cause cancer and/or reproductive toxicity. **WHMIS Classification:** Class B, Div 3: Combustible liquid. Class D, Div 2: Subdiv B: Chronic toxic effects. **EINECS Inventory Status:** This product, or its components, are listed on or are exempt from the European Inventory of Existing Chemical Substances (EINECS) or the European List of Notified Chemical Substances (EILINCS). **Australia Inventory Status:** Not determined. **Japan Inventory Status:** Not determined.

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The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. This Material Safety Data Sheet was prepared to comply with the OSHA Hazard Communication Standard (29 CFR 1910.1200). This supersedes any previous information.