



Material Safety Data Sheet

Occupational Safety and Health Administration, (Non-Mandatory Form), Form Approved OMB No. 1218-0072

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IDENTITY: <i>EST DYNAMIC ENGINE FLUSH #5920</i>	Health: 2 Fire: 2 React: 0 PPE: Gloves, Safety Glasses
Product Description: Engine oil flushing solution	Hazard Rating System (NFPA) 0 = Minimal 1 = Slight 2 = Moderate 3 = High 4 = Extreme

Section I - Identification

Manufacturer's Name: EnviroLution	Emergency Telephone Number: 818 256-2355
Address: 511 Fifth Street, San Fernando, CA 91340	Telephone Number for Information: 818 256-2379
	Date Prepared: June 2004

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	Cas No.	% (optional)	OSHA PEL	ACGIH TLV	Other Limits Recommended
Hydrocarbon Solvent	Mixture		100 PPM	100 PPM	
Ethylene Glycol Monobutyl Ether	111-76-2		120 MG/3M	121 MG/3M	See Section IX

Section III - Physical/Chemical Characteristics

Boiling Point	150 - 173 C.	Specific Gravity (H₂O = 1)	0.86
Freezing Point	< 40 C.	pH	Not applicable
Vapor Pressure (mm Hg @ 20 C.)	6 est.	% Volatile	
Vapor Density (AIR = 1)	4.6 est.	Melting Point	Not applicable
Solubility in Water	Slightly soluble	Evaporation Rate (Butyl Acetate = 1)	<1
Appearance and Odor	Clear, slight solvent odor		



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Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): 61 C. (TCC)	Flammable Limits:	LEL: 1.6 %	UEL: 7 %
Extinguishing Media: Water Fog, Alcohol Foam, Carbon Dioxide, Dry Chemical. DO NOT use straight water streams.			
Special Fire Fighting Procedures: Wear approved SCBA with full-face piece operated in the positive pressure demand mode to protect against hazardous effect of normal products of combustion or oxygen deficiency.			
Hazardous Combustion: Burning generates carbon monoxide, carbon dioxide unidentified organic compounds and smoke.			
Unusual Fire and Explosion Hazards:			

Section V - Reactivity Data

Stability	Unstable		Conditions to avoid
	Stable	X	
Incompatibility (Materials to Avoid): Avoid oxidizing agents.			
Hazardous Decomposition or Byproducts: Burning generates carbon monoxide, carbon dioxide and smoke.			
Hazardous Polymerization	May Occur		Conditions to avoid
	Will Not Occur	X	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? Yes	Skin? Yes	Ingestion? Yes
Health Hazards (Acute and Chronic) Skin Contact – Prolonged skin contact may cause irritation and dermatitis. Eye Contact – Product is practically non-irritating to the eyes. Ingestion – Harmful or fatal if swallowed. Ingestion may cause vomiting, headache, and other medical problems. Inhalation – Vapors may cause nasal and respiratory irritation. High concentrations of this product can lead to central nervous system depression			
Carcinogenicity: No	NTP? No	IARC Monographs? No	OSHA Regulated? No.
Signs and Symptoms of Exposure: Skin Contact – Skin contact is not expected to be harmful, but may be slightly irritating to the skin. Eye Contact – Product is mildly irritating to the eyes. Ingestion – Product may be harmful or fatal if swallowed. Ingestion may cause vomiting, headache, and other medical problems. Inhalation – Vapors may cause nasal, respiratory irritation, headache, nausea, dizziness, and in coordination. Note: This product is not a primary skin irritant after exposure of short duration and is not a skin desensitizer.			
Medical Conditions Generally Aggravated by Exposure: None currently known.			
Emergency and First Aid Procedures: Skin Contact – Wash affected area with soap and water and remove contaminated clothing. Get medical attention if irritation persists. Eyes – Immediately flush with water for at least 15 minutes while holding the eyelids apart and away from the eyeballs during flushing. Seek medical attention if irritation occurs. Ingestion – DO NOT INDUCE VOMITING. Guard against aspiration by having the person turn onto their left side. DO NOT GIVE LIQUIDS TO A DROWSY, CONVULSING OR UNCONSCIOUS PERSON. If vomiting occurs spontaneously, keep head below hips to prevent aspiration pneumonitis. Transport immediately to nearest medical facility for treatment. NOTE TO PHYSICIAN SEE SECTION IX. Inhalation – Move to fresh air. If breathing is difficult, administer oxygen until the victim is able to breathe on his or her			



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own without difficulty. Seek medical attention.

Section VII - Precautions for Safe Handling and Use

Steps to be Taken in Case Material is Released or Spilled: Do not allow to enter waterways. Contain and collect with absorbent. Product may ignite.
Waste Disposal Method: Dispose of in accordance with local, state, and federal laws.
Precautions to Be taken in Handling: Do not get on eyes, skin or clothes.
Precautions to Be taken in Storage: None
Special Shipping Instructions: None
Other Precautions: Keep away from open flame and high temperatures.

Section VIII - Control Measures

Respiratory Protection (<i>Specify Type</i>): None required for normal use.		
Ventilation	Local Exhaust: N/A	Special: N/A
	Mechanical (<i>General</i>): N/A	Other: Normal air circulation.
Protective Gloves: Nitrile/Vinyl/Rubber	Eye Protection: Glasses/Goggles (Recommended). Contact lens should not worn when working with this product.	
Other Protective Clothing or Equipment: Coveralls/Apron		
Work/Hygienic Practices: Always wash you hands after handling chemicals. Never wear contaminated clothing.		

Section IX – Other Information

Toxicology Data: Test on laboratory animals indicate that material (Ethylene Glycol Monobutyl Ether) may produce adverse reproductive effects.

LD50 Oral Rat > 34.6 g/kg
LC50 Inhalation Rat > 1277 ppm for 6 hours
LD50 Dermal Rabbit > 15.4 g/kg

Note To Physician: The main hazard following accidental ingestion is aspiration of the liquid into the lungs producing chemical pneumonitis. If more than 2.0 mL/kg has been ingested, vomiting should be induced with supervision. If symptoms such as loss of gag reflex, convulsions, or unconsciousness occur before vomiting, gastric lavage with a cuffed endotracheal tube should be considered.

EnviroLution makes no warranty, representation or guarantee as to the accuracy, sufficiency or completeness of the material set forth herein. It is the user's responsibility to determine the safety, toxicity and suitability of his own use, handling and disposal of this product. Since actual use by others is beyond our control, no warranty, expressed or implied, is made by EnviroLution as to the effects of such use, the results to be obtained or the safety and toxicity of this product referred to herein. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.



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