

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens Engine Flush
MSDS NO. 4609
Revision Date: 03/27/2002

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsens Engine Flush
Synonyms: None
Emergency Telephone (24 hr.): CHEMTREC 1-800-424-9300
Supplier:
Technical Chemical Company, P.O. Box 139, Cleburne, Texas 76033

2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient/CAS No.	wt. %	OSHA PEL TWA	OSHA PEL Ceiling Limits	ACGIH TLV TWA	ACGIH TLV STEL
Petroleum Distillate (Naphtha) 8008-20-6	90-99	None Established	None Established	None Established	None Established
Naphthalene 91-20-3	1-2	10 ppm	None Established	10 ppm	15 ppm
1,2,4-trimethylbenzene 95-63-6	0-1	Not Established	Not Established	Not Established	Not Established

3. HAZARDS IDENTIFICATION

Emergency Overview: Caution: Combustible Harmful if inhaled. Harmful or fatal if liquid is aspirated into lungs. Gross inhalation overexposure may cause: Central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness or death. Keep away from heat, sparks and flame. Avoid breathing vapors. Do not get in eyes, on skin, or on clothing. May cause delayed lung injury.

4. FIRST AID MEASURES

Eye Contact: In case of contact, or suspected contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention immediately after flushing.
Ingestion: If swallowed, do NOT induce vomiting. Call a physician immediately. Never give anything by mouth to an unconscious person.
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.
Skin Contact: Wash with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): >155 F
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): .7 vol %
Flammable Limits in Air - Upper (%): 6 vol %
Autoignition Temperature °F(°C): >600 F
Extinguishing Media: Carbon Dioxide, Dry Chemicals, Foam. Water stream may spread fire. Use water spray to keep containers cool that are exposed to heat or flames.

Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Fumes and Smoke. Carbon Monoxide.
Aerosol Comments: Not Applicable

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Wear protective equipment specified.
Increase area ventilation. Remove sources of ignition. Leaking containers should be removed to an isolated, well-ventilated area and transferred to other suitable containers. Wipe, scrape or soak up in an inert material and put in a container for disposal.
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Keep away from heat and open flame. Keep containers tightly closed when not in use. Wash thoroughly after handling. Use only

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Storage: with adequate ventilation. Avoid extreme temperatures. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation. Showers. Eyewash stations.
Eyes: Wear safety glasses or goggles to protect against exposure. Chemical goggles; also wear a face shield if splashing hazard exists.
Skin Protection: Avoid skin contact. Wear protective clothing and gloves. Neoprene coated apron or clothing. Nitrile coated apron or clothing.
Respiratory Protection: Use an approved NIOSH organic vapor respirator below the TLV. If TLV is exceeded or overexposure is likely, use positive pressure or self contained breathing apparatus.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Colorless to light yellow liquid	pH Value:	Essentially neutral
Odor:	KEROSENE	Vapor Density (Air=1):	6
Vapor Pressure:	.37 mm @ 100 F	Melting/Freezing Point:	Not determined.
Boiling Point (°F):	400-515 F	Bulk Density at 20°C:	Not Determined
Solubility in Water:	NEGLIGIBLE	Evaporation Rate:	Not Determined
Molecular Weight:	Mixture	Specific Gravity (H20=1):	.79 @ 70F
Viscosity:	1.7 cst @ 40C	Decomposition Temperature:	Not Known
VOC Content(%):	99.7-100%		

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Keep away from heat, sparks and flame. Do not expose to heat or store at temperatures above 120°f.
Materials to Avoid: Strong oxidizing agents.
Hazardous Decomposition Products: Carbon monoxide. and other asphxiants.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Ingredient/CAS No.	wt. %	Route	Species	Dose
Petroleum Distillate (Naphtha) 8008-20-6	90-99	NA	NA	Not known.
Naphthalene 91-20-3	1-2	Inhalation	Rats	LC50 340 mg/m3/1H
1,2,4-trimethylbenzene 95-63-6	0-1	Inhalation	Rats	LC50 18 gm/m3/4H

Carcinogenicity:

Ingredient/CAS No.	wt. %	IARC	NTP	OSHA
Petroleum Distillate (Naphtha) 8008-20-6	90-99	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	1-2	Not Listed	Not Listed	Not Listed
1,2,4-trimethylbenzene 95-63-6	0-1	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.

Waste Management: Not determined.

Disposal should be made in accordance with federal, state and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT:

Proper Shipping Name: Not Regulated
 Hazard Class: Not Applicable
 UN/NA Number: Not Applicable
 DOT Packing Group: Not Applicable

IMDG:

Proper Shipping Name: Not Regulated
 Hazard Class: Not Applicable
 Hazard Subclass: Not Applicable
 UN No.: Not Applicable
 Packing Group: Not Applicable
 Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Ingredient/CAS No.	wt. %	SARA 313	SARA 302	RQ	TPQ
Petroleum Distillate (Naphtha) 8008-20-6	90-99	Not Listed	Not Listed	NA	NA
Naphthalene 91-20-3	1-2	Listed	Not Listed	100 lbs	NA
1,2,4-trimethylbenzene 95-63-6	0-1	Listed	Not Listed	NA	NA

SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Ingredient/CAS No.	wt. %	California Prop. 65 Cancer list	California Prop. 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
Petroleum Distillate (Naphtha) 8008-20-6	90-99	Not Listed	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	1-2	Not Listed	Not Listed	Not Listed	Not Listed
1,2,4-trimethylbenzene 95-63-6	0-1	Not Listed	Not Listed	Not Listed	Not Listed

U.S. TSCA:

The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

General Notes:

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Disclaimer:

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