

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens Engine Flush
MSDS NO. 4609
Revision Date: 04/11/2006
Date Printed: 12/30/2008

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

Component	Weight %	OSHA TWA	OSHA STEL	OSHA SKIN
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

Component	Weight %	OSHA Z PEL	OSHA Z TWA	OSHA Z Ceiling
Petroleum Distillate (Naphtha) 8008-20-6	90-99	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	1-2	50 mg/m ³ 10 ppm	50 mg/m ³ 10 ppm	Not Listed
1,2,4-trimethylbenzene 95-63-6	0-1	Not Listed	Not Listed	Not Listed

Component	ACGIH TLV TWA	ACGIH TLV STEL	ACGIH TLV Ceiling
Petroleum Distillate (Naphtha) 8008-20-6	200 mg/m ³ Non-aerosol. total hydrocarbon vapor	Not Listed	Not Listed
Naphthalene 91-20-3	10 ppm	15 ppm	Not Listed
1,2,4-trimethylbenzene 95-63-6	Not Listed	Not Listed	Not Listed

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.

HMIS Classification: Health: 1 Flammability: 2 Physical Hazard: 0
NFPA Rating: Health: 1 Flammability: 2 Reactivity: 0

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.

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4. FIRST AID MEASURES

Skin Contact: Wash with soap and water. Remove contaminated clothing and shoes, 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.
Action to be taken if material is released or spilled: 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 Storage: Keep away from heat and open flame. Keep containers tightly closed when not in use. Wash thoroughly after handling. Use only 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
Odor: KEROSENE
pH Value: Essentially neutral
Vapor Pressure: .37 mm @ 100 F
Vapor Density (Air=1): 6
Boiling Point (°F): 400-515 F
Melting/Freezing Point: Not determined.
Solubility in Water: NEGLIGIBLE
Bulk Density at 20°C: Not Determined
Molecular Weight: Mixture
Specific Gravity (H2O=1): .79 @ 70F
Viscosity: 1.7 cst @ 40C
Evaporation Rate: Not Determined

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9. PHYSICAL AND CHEMICAL PROPERTIES

VOC Content(%): 99.7-100%
Decomposition Temperature: Not Known

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:

Component	Route	Species	Dose
Petroleum Distillate (Naphtha) 8008-20-6	NA	NA	Not known.
Naphthalene 91-20-3	Inhalation	Rats	LC50 340 mg/m ³ /1H
1,2,4-trimethylbenzene 95-63-6	Inhalation	Rats	LC50 18 gm/m ³ /4H

Carcinogenicity:

Component	IARC	NTP	OSHA
Petroleum Distillate (Naphtha) 8008-20-6	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	Not Listed	Not Listed	Not Listed
1,2,4-trimethylbenzene 95-63-6	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

Remarks: Ecological testing has not been conducted on this product.

13. DISPOSAL CONSIDERATION

Waste Classification: Not determined.
Waste Management: Not determined.
Disposal Method: 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

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14. TRANSPORTATION INFORMATION

Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

Component	SARA 313	SARA 302	TPQ	RQ
Petroleum Distillate (Naphtha) 8008-20-6	Not Listed	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	Listed.	Not Listed	Not Listed	Not Listed
1,2,4-trimethylbenzene 95-63-6	Listed.	Not Listed	Not Listed	Not Listed

SARA 311/312 Hazard Categories: Not Determined.

State Regulations:

Component	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	Not Listed	Not Listed	Not Listed	Not Listed
Naphthalene 91-20-3	Listed: April 19, 2002 Carcinogenic.	Not Listed	Not Listed	Not Listed
1,2,4-trimethylbenzene 95-63-6	Not Listed	Not Listed	Not Listed	Not Listed

Component	New Jersey Right-to-Know List:
Petroleum Distillate (Naphtha) 8008-20-6	Substance no. 1091
Naphthalene 91-20-3	Substance no. 1322 Substance no. 3006

U.S. TSCA: The components of this product are listed on the TSCA Inventory.
Canadian Inventory: The components of this product are listed on the Canadian DSL or NDSL Inventory.

Consumer Product Safety Improvement Act of 2008 General Conformity Certification

The Supplier identified in Section 1 of this MSDS has evaluated this product and certifies it to be labeled and packaged in compliance with the applicable provisions of the Federal Hazardous Substance Act as stated in 16 CFR 1500 and enforced by the Consumer Product Safety Commission, and where applicable the products that require Child Resistant Closures are packaged in accordance with the Poison Prevention Packaging Act as stated in 16 CFR 1700 and enforced by the Consumer Product Safety Commission. All closures have been tested in accordance with the latest protocols. No other testing is required to certify compliance with the above. The date of manufacture is stamped on the product container.

16. OTHER INFORMATION

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

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16. OTHER INFORMATION

Disclaimer:

The information and recommendations contained herein are based upon tests believed to be reliable. However, the manufacturer/distributor of this product does not guarantee their accuracy or completeness NOR SHALL ANY OF THIS INFORMATION CONSTITUTE A WARRANTY, WHETHER EXPRESSED OR IMPLIED, AS TO THE SAFETY OF THE GOODS, THE MERCHANTABILITY OF THE GOODS, OR THE FITNESS OF THE GOODS FOR A PARTICULAR PURPOSE. Adjustment to conform to actual conditions of usage may be required. The manufacturer/distributor assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied.