

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsens A/C Flush (Solvent Based)
MSDS NO. 6544
Revision Date: 10/29/2009
Date Printed: 10/29/2009

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsens A/C Flush (Solvent Based)
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
Heptane 142-82-5	72-77	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	20-30	Not Listed	Not Listed	Not Listed

Component	Weight %	OSHA Z PEL	OSHA Z TWA	OSHA Z Ceiling
Heptane 142-82-5	72-77	2000 mg/m ³ 500 ppm	1600 mg/m ³ 400 ppm	Not Listed
Isopropyl Alcohol 67-63-0	20-30	980 mg/m ³ 400 ppm	980 mg/m ³ 400 ppm	Not Listed

Component	ACGIH TLV TWA	ACGIH TLV STEL	ACGIH TLV Ceiling
Heptane 142-82-5	400 ppm	500 ppm	Not Listed
Isopropyl Alcohol 67-63-0	200 ppm	400 ppm	Not Listed

3. HAZARDS IDENTIFICATION

Emergency Overview: Danger: Extremely flammable. May be fatal if swallowed. Harmful or fatal if liquid is aspirated into lungs. Causes severe eye irritation. May cause severe skin irritation. This material is readily absorbed through the skin in liquid or vapor phase. Gross inhalation overexposure may cause: Central nervous system depression with dizziness, confusion, incoordination, drowsiness or unconsciousness or death.

HMIS Classification: Health: *2 Flammability: 3 Physical Hazard: 0
NFPA Rating: Health: 1 Flammability: 3 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: DO NOT INDUCE VOMITING. Give nothing by mouth. Get medical attention! If vomiting occurs, keep head lower than hips to prevent aspiration.
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 for 15 minutes. Get medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): 15 F (-26 C) (lowest Component)
Flash Point Method: TAG Closed Cup
Flammable Limits in Air - Lower (%): 1.2% (lowest Component)
Flammable Limits in Air - Upper (%): 6.7% (lowest Component)

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5. FIRE FIGHTING MEASURES

Autoignition Temperature °F(°C): Not Determined
Extinguishing Media: Carbon dioxide. Dry chemical. Foam. 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. Vapor may cause flash fire. Closed containers may explode if exposed to extreme heat. Water fog or spray may be used to cool exposed equipment and containers. Do not spray water directly on fire - product will float and could be reignited on surface of water.

Hazardous Combustion Products: Oxides of Carbon. Mixed hydrocarbons. Fumes and Smoke.
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. Avoid all sources of ignition; heat, sparks and open flames.
Action to be taken if material is released or spilled: Persons not trained should evacuate area. Remove sources of ignition. Increase area ventilation. Wipe, scrape, or soak up in an inert material and put in a container intended for flammable materials for disposal.
Environmental Precautions: Do not allow to enter sanitary drains, sewer or surface and subsurface waters.

7. HANDLING AND STORAGE

Handling and Storage: Warning: Flammable. Use only in a well ventilated area. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Keep container closed when not in use. Keep away from food and smoking materials. Wash hands before eating and smoking. Keep away from heat and open flame. Good hygienic practices should be observed. Work clothes should be washed separately at the end of each work day. Contaminated disposable clothing should be discarded in accordance with local, state and federal rules. Bond and ground during transfer.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation. Showers. Eyewash stations.
Eyes: Chemical goggles; also wear a face shield if splashing hazard exists. Do NOT wear contact lenses.
Skin Protection: Avoid skin contact. Wear protective clothing and gloves. Use gloves resistant to the material being used (Viton, Nitrile). Launder contaminated clothing before reuse.
Respiratory Protection: Use local exhaust to capture vapor, mists or fumes, if necessary. Provide ventilation sufficient to prevent exceeding recommended exposure limit or buildup explosive concentrations of vapor in air. No smoking, or use of flame or other ignition sources. Use approved NIOSH respiratory protection if TLV exceeded.... Or over exposure is likely.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to light yellow liquid
Odor: Solvent/Lemon
pH Value: Not Determined
Vapor Pressure: Not Determined
Vapor Density (Air=1): Not Determined
Boiling Point (°F): 180 F (82 C) (lowest Component)
Melting/Freezing Point: Not determined.
Solubility in Water: approx. 25%
Bulk Density at 20°C: 6.00 lb/gal
Molecular Weight: Mixture
Specific Gravity (H2O=1): .92 @ 60 F
Viscosity: .83 cSt @ 100 F
Evaporation Rate: Not Determined
VOC Content(%): Not Determined.
Decomposition Temperature: Not Known

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.

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10. STABILITY AND REACTIVITY

Conditions to Avoid: Avoid any source of ignition. High temperatures. Avoid contact with strong oxidants such as liquid chlorine and concentrated oxygen.

Materials to Avoid: Aluminum metals, NITROFORM. Strong oxidizing agents. Sulfuric Acid. Concentrated oxygen.

Hazardous Decomposition Products: Oxides of carbon. Mixed Hydrocarbons. Smoke and Fumes.

Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Component	Route	Species	Dose
Heptane 142-82-5	Inhalation	Rats	LC50 103 gm/m ³ /4H
Isopropyl Alcohol 67-63-0	Inhalation	Rats	LC50 16,000 ppm

Carcinogenicity:

Component	IARC	NTP	OSHA
Heptane 142-82-5	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	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: Flammable Liquid, n.o.s. (Heptane, Isopropyl Alcohol)
Hazard Class: 3
UN/NA Number: UN 1993
DOT Packing Group: PG II

IMDG:

Proper Shipping Name: Flammable Liquid, n.o.s., (Heptane, Isopropyl Alcohol)
Hazard Class: 3

Hazard Subclass: Not determined.
UN No.: UN 1993
Packing Group: PG II
Marine Pollutant: No

15. REGULATORY INFORMATION

US Federal Regulations:

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Component	SARA 313	SARA 302	TPQ	RQ
Heptane 142-82-5	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	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
Heptane 142-82-5	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	Not Listed	Not Listed	Not Listed	Not Listed

Component	New Jersey Right-to-Know List:
Heptane 142-82-5	Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430 Substance no. 1339
Isopropyl Alcohol 67-63-0	Substance no. 1076 Substance no. 2079 Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430 Substance no. 2381

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.