

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
MSDS NO. 6644
Revision Date: 12/04/2008
Date Printed 12/30/2008

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
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
n-Propyl bromide 106-94-5	95-100	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	1-5	Not Listed	Not Listed	Not Listed
proprietary ingredient unk	1-5	Not Listed	Not Listed	Not Listed

Component	Weight %	OSHA Z PEL	OSHA Z TWA	OSHA Z Ceiling
n-Propyl bromide 106-94-5	95-100	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	1-5	980 mg/m ³ 400 ppm	980 mg/m ³ 400 ppm	Not Listed
proprietary ingredient unk	1-5	Not Listed	Not Listed	Not Listed

Component	ACGIH TLV TWA	ACGIH TLV STEL	ACGIH TLV Ceiling
n-Propyl bromide 106-94-5	10 ppm	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	200 ppm	400 ppm	Not Listed
proprietary ingredient unk	Not Listed	Not Listed	Not Listed

3. HAZARDS IDENTIFICATION

Emergency Overview: Caution: Aspiration hazard. May cause irritation to skin and eyes. Mist may cause respiratory tract irritation. Vapor may cause flash fire.

HMIS Classification: Health: 1 Flammability: 1 Reactivity: 0 Special: B
NFPA Rating: Health: 1 Flammability: 1 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: Aspiration hazard if swallowed - can enter lungs and cause damage. Do Not Induce Vomiting Get immediate medical attention. If vomiting occurs, keep head lower than hips to prevent aspiration. If victim is conscious and alert, give 1-2 glasses of water to drink. Never give fluids or induce vomiting if the victim is unconscious or having convulsions.

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.

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
MSDS NO. 6644
Revision Date: 12/04/2008
Date Printed: 12/30/2008

4. FIRST AID MEASURES

Skin Contact: In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Get medical attention if irritation persists. Wash clothing before reuse.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash Point °F(°C): None
Flash Point Method: Not Determined
Flammable Limits in Air - Lower (%): 2
Flammable Limits in Air - Upper (%): 5
Autoignition Temperature °F(°C): 400
Extinguishing Media: Alcohol foam. On small fires, dry chemical, dry sand, or CO2 may also be effective in large quantities.
Protection Of Fire-Fighters:

Special Fire-Fighting Procedures: Wear approved positive-pressure self-contained breathing apparatus and protective clothing.
Hazardous Combustion Products: Carbon Dioxide. Halogenated compounds.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate protective clothing and equipment to prevent skin and eye contact.
Spill Procedures: Wear protective equipment specified. Keep away from heat sparks and flames. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Action to be taken if material is released or spilled: Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not allow any potentially contaminated water, including rain water runoff from fire fighting or spills to enter any waterway, sewer, or drain.
Environmental Precautions: Keep away from drains.

7. HANDLING AND STORAGE

Handling and Storage: Use ground strap. Keep container closed when not in use. Avoid breathing vapors, if exposed to high vapor concentration, leave area at once. Avoid contact with skin and eyes. Use only in a well ventilated area. Wash hands before eating and smoking.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: Exhaust ventilation.
Eyes: Wear safety glasses or goggles to protect against exposure.
Skin Protection: Avoid skin contact. Wear protective clothing and gloves. Use chemical resistant gloves for prolonged skin contact.
Respiratory Protection: Use in a well ventilated area. Use approved NIOSH respiratory protection if TLV exceeded..... Or over exposure is likely.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear colorless liquid.
Odor: MILD
pH Value: Not Determined
Vapor Pressure: 18.5 kPa @ 20C
Vapor Density (Air=1): >1
Boiling Point (°F): 153.9
Melting/Freezing Point: -166
Solubility in Water: Insoluble in cold water.
Bulk Density at 20°C: Not Determined
Molecular Weight: Not Determined
Specific Gravity (H2O=1): 1.23 - 1.26
Viscosity: >7 cSt (estimated)
Evaporation Rate: Not Determined
VOC Content(%): Not determined.
Decomposition Temperature: Not Known

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
MSDS NO. 6644
Revision Date: 12/04/2008
Date Printed 12/30/2008

10. STABILITY AND REACTIVITY

Chemical Stability: STABLE.
Conditions to Avoid: Avoid any source of ignition.
Materials to Avoid: Contact with oxidizing agents.
Hazardous Decomposition Products: Carbon dioxide.
Hazardous Polymerization: WILL NOT OCCUR

11. TOXICOLOGICAL INFORMATION

Toxicological Data:

Component	Route	Species	Dose
n-Propyl bromide 106-94-5	Inhalation	Rats	253 gm/m ³ /30M
Isopropyl Alcohol 67-63-0	Inhalation	Rats	LC50 16,000 ppm
proprietary ingredient unk	Inhalation	Rats	Not known.

Carcinogenicity:

Component	IARC	NTP	OSHA
n-Propyl bromide 106-94-5	Not Listed	Assigned to Laboratory for Toxicology/Carcinogenesis Study.	Not Listed
Isopropyl Alcohol 67-63-0	Not Listed	Not Listed	Not Listed
proprietary ingredient unk	Not Listed	Not Listed	Not Listed

12. ECOLOGICAL INFORMATION

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: ORM-D CONSUMER COMMODITY
Hazard Class: ORM-D
UN/NA Number: Not Applicable
DOT Packing Group: Not Applicable

IMDG:

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

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
MSDS NO. 6644
Revision Date: 12/04/2008
Date Printed 12/30/2008

15. REGULATORY INFORMATION

US Federal Regulations:

Component	SARA 313	SARA 302	TPQ	RQ
n-Propyl bromide 106-94-5	Not Listed	Not Listed	Not Listed	Not Listed
Isopropyl Alcohol 67-63-0	Listed.	Not Listed	Not Listed	Not Listed
proprietary ingredient unk	Not Listed	Not Listed	Not Listed	Not Listed

SARA 311/312 Hazard Categories: Immediate

State Regulations:

Component	California Prop. 65 Cancer list	California - Prop 65 Developmental Toxicity	California Prop. 65 Reproductive Female	California Prop. 65 Reproductive Male
n-Propyl bromide 106-94-5	Not Listed	Listed: December 7, 2004 Developmental toxin.	Listed: December 7, 2004 Female reproductive toxin.	Listed: December 7, 2004 Male reproductive toxin.
Isopropyl Alcohol 67-63-0	Not Listed	Not Listed	Not Listed	Not Listed
proprietary ingredient unk	Not Listed	Not Listed	Not Listed	Not Listed

Component	New Jersey Right-to-Know List:
n-Propyl bromide 106-94-5	Substance no. 0267 Substance no. 2422 Substance no. 2423 Substance no. 2425 Substance no. 2426 Substance no. 2427 Substance no. 2428 Substance no. 2429 Substance no. 2430
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: One or more components of this product is not listed on the TSCA Inventory.
Canadian Inventory: One or more components of this product is not listed on the Canadian DSL or NDSL Inventory.
Carcinogenicity: No component of this product at levels greater than .1% is identified as a carcinogen by ACGIH or the International Agency for Research on Cancer (IARC).

MATERIAL SAFETY DATA SHEET

Trade Name: Johnsen's Premium AC Flush Non-Flammable 1 Gal
MSDS NO. 6644
Revision Date: 12/04/2008
Date Printed 12/30/2008

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:
Disclaimer:

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