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ITW CHEMTRONICS

MSDS #1613

**SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

**Company Address:**  
125 Cobb Center Drive  
Kennesaw, GA 30152

Product Information: 800-TECH-401  
Customer Service: 800-645-5244

Emergency: (Chemtrec) 800-424-9300  
Revision Date: April 4, 2008

**Product Identification****New & Improved Pow-R-Wash® NR**

Product Code: ES1613

**SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	CAS#	Wt. % Range
n-propyl bromide	106-94-5	65.0-75.0
1,2 Epoxybutane	106-88-7	0.1-1.0
t-Butanol	75-65-0	0.1-1.0
1,1,1,2-Tetrafluoroethane	811-97-2	5.0-25.0
Carbon Dioxide	124-38-9	1.0-5.0

**SECTION 3: HAZARD IDENTIFICATION**

**Emergency Overview:** Clear, colorless liquid with faint ethereal odor. This product is nonflammable. Liquid may irritate eyes and skin under repeated or prolonged exposure. Breathing high concentrations of product vapor may produce dizziness and nausea.

**Potential Health Effects:**

**Eyes:** Liquid, aerosols and vapors of this product may be irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation.

**Skin:** Prolonged contact can cause skin irritation, including redness, burning, drying and/or cracking of skin..

**Ingestion:** May be harmful if swallowed. Swallowing this material may result in nausea, vomiting and weakness followed by central nervous system depression.

**Inhalation:** Can be harmful if inhaled. High concentrations of vapors in immediate area can cause dizziness, nausea, vomiting, unconsciousness and death.

**SECTION 4: FIRST AID MEASURES**

**Eyes:** Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Have eyes examined and tested by medical personnel if irritation develops or persists.

**Skin:** Wash skin with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persist. Wash clothing before reuse.

**Ingestion:** If swallowed, do not induce vomiting. If conscious, give 2 glasses of water. Never give anything by mouth to an unconscious person. Keep head below knees to minimize chance of aspirating material into the lungs. Get medical attention immediately.

**Inhalation:** Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention.

**SECTION 5: FIRE FIGHTING MEASURES**

**Flash Point:** None to boiling (TCC) **Flammable/Explosion limits:** LEL 4.0 / UEL 8.0 (% volume in air)

**Extinguishing Media:** Use water spray or fog, CO2, dry chemical or water stream when fighting fires involving this material.

**Fire Fighting Instructions:** As in any fire, wear self-contained breathing apparatus (pressure-demand, MSHA/NIOSH approved or equivalent) and full protective gear.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Spills:** Shut off leak if possible and safe to do so. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container for proper disposal. Do not flush to sewer. Avoid runoff into storm sewers and ditches which lead to waterways.

**SECTION 7: HANDLING AND STORAGE**

Avoid prolonged or repeated contact with eyes, skin, and clothing. Wash hands before eating. Use with adequate ventilation. Avoid breathing product vapor or mist. Do not reuse this container. Store in a cool dry place away from heat, sparks and flame. Do not store in direct sunlight.

**KEEP OUT OF REACH OF CHILDREN.****SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****Exposure Guidelines:**

CHEMICAL NAME	ACGIH TLV	OSHA PEL	OTHER
n-propyl bromide	10 ppm	NE	
1,2 Epoxybutane	NE	NE	
t-Butanol	100 ppm	100 ppm	150 ppm STEL NIOSH
1,1,1,2-Tetrafluoroethane	NE	NE	1000 ppm (Dupont)

NE = Not Established

**Work/Hygienic Practices:** Good general ventilation should be sufficient to control airborne levels. If vapor concentration exceeds TLV, use NIOSH approved organic vapor cartridge respirator. Wear safety glasses with side shields (or goggles) and rubber or other chemically resistant gloves.

**NFPA and HMIS Codes:**

	NFPA	HMIS
Health	2	2
Flammability	1	1
Reactivity	1	1
Personal Protection	-	B

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Physical State: Clear, colorless liquidOdor: Characteristic OdorpH: NAVapor Pressure: 112 mmHg@ 70FBoiling Point: 156°F (69C)Solubility in Water: NegligibleSpecific Gravity: 1.35

(Water =1)

Evaporation Rate: >1 (Butyl acetate=1)Percent Volatile: 100%**SECTION 10: STABILITY AND REACTIVITY**Stability - This product is stable under normal conditions.Conditions to Avoid: Steam, oxidizers, elevated temperatures. Do not spray near open flames, red hot surfaces or other sources of ignition.Incompatibility: Do not mix with strong oxidizers and strong bases.Products of Decomposition: Thermal decomposition may release hydrogen bromide, carbon monoxide and carbon dioxide.Hazardous Polymerization: Will not occurConditions to Avoid: Keep away from ignition source.**SECTION 11: TOXICOLOGICAL INFORMATION**Inhalation:

n-propyl bromide

LC50 rats 253 000 mg/m3/0.5hr\*

Reproductive effects: n-propyl bromide

NOEL rats 100 ppm

Tetrafluoroethane

Rats ALC 567,000ppm/4hrs

(Rozman and Doull, 2002)

LOEL rats 250 ppm

Carbon Dioxide

LCLo/Human 9pph/5min

Ingestion:

n-propyl bromide

LD50/rats

4260 mg/kg\*

\*Information provided by manufacturer.

Cancer Information: No ingredients in this product are listed as human carcinogens by IARC or NTP.

Reproductive effects: n-propyl bromideTeratogenic effects: noneMutagenic effects: none**SECTION 12: ECOLOGICAL INFORMATION**

Avoid runoff into storm sewers and ditches which lead to waterways. Water runoff can cause environmental damage.

**REPORTING**

US regulations require reporting spills of this material that could reach any surface waters.

The toll free number for the US Coast Guard National Response Center is: **1-800-424-8802****SECTION 13: DISPOSAL CONSIDERATIONS**

Dispose of in accordance with all federal, state and local regulations. Water runoff can cause environmental damage.

**SECTION 14: TRANSPORTATION INFORMATION**

	Proper Shipping Name	UN Number	Class	Sub. Risk	Pkg. Group	Hazard Label	Pkg. Instr.	Max. Quantity
<u>Air:</u>	Aerosols non-flammable	UN 1950	2.2	NA	NA.	Non-flammable	203	75 k.g; 150k.g.
<u>Ground:</u>	Consumer Commodity	NA	ORM-D	NA	NA	ORM-D	Pkg. Auth.	173.306

**SECTION 15: REGULATORY INFORMATION****SECTION 313 SUPPLIER NOTIFICATION**

This product contains the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

**Chemical Name****CAS No.****Wt. % Range**

1,2 Epoxybutane

106-88-7

0.1-1.0

This information should be included on all MSDSs copied and distributed for this material.

**TOXIC SUBSTANCES CONTROL ACT (TSCA).**

All ingredients of this product are listed on the TSCA Inventory.

**CALIFORNIA PROPOSITION 65:** This product contains n-propyl bromide, a chemical known to the state of California to cause birth defects or other reproductive harm.**WHMIS:** Class A; Class D2A; Class D2B

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

**SECTION 16: OTHER INFORMATION**

This product is a Level 1 aerosol. Do not puncture or incinerate containers. Normal ventilation for standard manufacturing practices is usually adequate. Local exhaust should be used when large amounts are released.

To the best of our knowledge, the information contained herein is accurate. However, all materials may present unknown hazards and should be used with caution. In particular, improper use of our products and their inappropriate combination with other products and substances may produce harmful results which cannot be anticipated. Final determination of the suitability of any material is the sole responsibility of the user. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that may exist.