ITW CHEMTRONICS MSDS #3104

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Company Address: 8125 Cobb Center Drive Kennesaw, GA 30152

Product Information: 800-TECH-401 Emergency: (Chemtrec) 800-424-9300 Customer Service: 800-645-5244 Revision Date: February 10, 2007

Product Identification

FLUX-OFF® CZ					
Product Code: ES7200, ES7208B, ES7200C, ES72	08BC				
SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS					
Chemical Name	CAS#	Wt. % Range			
Cirozane TM	Mixture	45.0-80.0			
trans-1,2-dichloroethylene	156-60-5	10.0-50.0			
1,1,1,2-Tetrafluoroethane	811-97-2	10.0-40.0			
n-Propanol	71-23-8	1.0-10.0			
Methylcyclohexane	108-87-2	1.0-10.0			

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.

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 and vomiting.

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.

<u>Ingestion:</u> 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)

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

<u>Spills:</u> 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. Keep container closed when not in use. Do not store in direct sunlight.

KEEP OUT OF REACH OF CHILDREN.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines:

CHEMICAL NAME	A COLLEGE AV	OCITA DEL	OTHER
CHEMICAL NAME	ACGIH TLV	OSHA PEL	OTHER
Cirozane™	NE	NE	750 ppm*
trans-1,2-dichloroethylene	200 ppm	200 ppm	
1,1,1,2-Tetrafluoroethane	NE	NE	1000 ppm (Dupont)
n-propanol	100 ppm	200 ppm	400 ppm STEL
Methylcyclohexane	400 ppm	500 ppm	
NE = Not Established	••	**	

^{*} Chemtronics Recommended Threshold Limit Value

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 when handling this material.

NFPA and HMIS Codes:	NFPA	HMIS
Health	1	1
Flammability	0	0
Reactivity	1	1
Personal Protection	-	В

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Clear, colorless liquid Solubility in Water: Negligible

Odor: Ethereal Odor Specific Gravity: 1.50

pH: NA (Water = 1)

Vapor Pressure: 220 mmHg@ 70F Evaporation Rate: >1 Percent Volatile: 100% (Butyl acetate=1) Boiling Point: 90°F (32C) Viscosity: NA

SECTION 10: STABILITY AND REACTIVITY

Stability - This product is stable.

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 chemically active metals such as potassium, magnesium, zinc and powdered aluminum, strong base, caustic soda, caustic potash or

Products of Decomposition: Thermal decomposition may release carbon monoxide, carbon dioxide, hydrogen chloride and hydrogen fluoride.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Finely divided active metals, alkali and alkaline earth metals

SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation: Ingestion:

trans-1,2-dichloroethylene LC50 Rats 24,100 ppm/4hrs Methylcyclohexane LD50 Mouse 2,250 mg/kg 567,000ppm/4hrs Tetrafluoroethane Rats ALC trans-1,2-dichloroethylene LD50 rats >5,000 mg/kg

 $41,500 \text{ mg/m}^3/2 \text{ hrs}$ Methylcyclohexane LC50/mouse

Skin MOD-SEV

trans-1,2-dichloroethylene LD50 rabbit >5,000 mg/kg trans-1,2-dichloroethylene

Methylcyclohexane LD50 rabbit >86,700 mg/kg Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

Teratogenic effects: none Reproductive effects: none Mutagenic 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 Sub. Pkg. Hazard Pkg. Max.								
	Shipping Name	UN Number	Class	Risk	Group	Label	Instr.	Quantity
	Simpping Name	OTV TVUITIOCI	Class	Kisk	Group	Laoci	msu.	Quantity
Air:	Aerosols non-flammable	UN 1950	2.2	NA	NA.	Non-flammable	203	75 k.g; 150k.g.
						Gas	Y203	30 kg
Ground:	Consumer Commodity	NA	ORM-D	NA	NA	ORM-D	Pkg.	173.306
	ORM-D						Auth.	

SECTION 15: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION

This product contains no toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372).

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.

WHMIS: Class A; 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.