

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**Company Address:**8125 Cobb Center Drive
Kennesaw, GA 30152Product Information: 800-TECH-401
Customer Service: 800-645-5244Emergency: (Chemtrek) 800-424-9300
Revision Date: October 6, 1997**Product Identification****ELECTRO-WASH CZ**

Product Code: ES7100, ES7108B

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt. % Range
Cirozane	Mixture	40.0-80.0
1,1,1,2-Tetrafluoroethane	811-97-2	10.0-30.0
Methylcyclohexane	108-87-2	1.0-10.0
Carbinol	67-56-1	1.0-3.0

Note: For industrial use only.

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 persists. 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)**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. 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	ACGIH TWA	OSHA PEL	OTHER TLV
Cirozane	NE	NE 545 ppm*	
1,1,1,2-Tetrafluoroethane	NE	NE	1000 ppm (Dupont)
Methylcyclohexane	400 ppm	500 ppm	400 ppm
Carbinol	200 ppm	200 ppm	200 ppm

NE = None Established

* = Chemtronics's Recommended Threshold Limit Value /Value based on computation

Work/Hygienic Practices: Good general ventilation should be sufficient to control airborne levels. This material does not have established exposure limits. 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	-	B

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**Physical State:** Clear, colorless liquid**Odor:** Ethereal Odor**pH:** NA**Vapor Pressure:** 220 mmHg@ 70 F (Liquid)

(Air = 1)

Boiling Point: 90°F (initial)**Solubility in Water:** Negligible**Specific Gravity:** 1.53
(Water=1)**Evaporation Rate:** >1
(Butyl acetate=1)**Viscosity:** NA**Percent Volatile:** 100%**SECTION 10: STABILITY AND REACTIVITY****Stability:** This product is stable.**Conditions to Avoid:** Steam, oxidizers, elevated temperatures. Keep away from 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 oxidizing.**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 INFORMATIONInhalation:

Cirozane *	LD50 rats	> 3000 ppm
Tetrafluoroethane	Rats ALC	567,000ppm/4hrs
Carbinol	LC50 rats	64,000ppm/4hrs
Methylcyclohexane	LC50/mouse	41,500 mg/m ³ /2 hrs

Ingestion:

Cirozane *	LD50/rats	>5g/kg
Carbinol	LD50 rats	5628mg/kg
Methylcyclohexane	LD50 Mouse	2,250 mg/kg

Skin

Carbinol	20mg/24H	MLD
Cirozane *	500 mg/rats	MLD
Methylcyclohexane	LD rabbit	> 86700 mg/kg

Eye:

Carbinol	40 mg	MOD
Cirozane *	150 mg/rats/24H	MLD

Cancer Information: No ingredients listed as human carcinogens by NTP or IARC

*Information provided by manufacturer.

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 n.o.s.	UN 1950	2.2	NA	NA.	Non-flammable Gas	203 Y203	75 k.g; 150k.g. 30 kg
<u>Ground:</u> Consumer Commodity ORM-D	NA	ORM-D	NA	NA	ORM-D	Pkg. Auth.	173.306

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

This product contains the following 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).

Carbinol	67-56-1	1.0-3.0
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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.

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.

REFERENCES: 29 CFR 1910.1200 40 CFR 300-700 ANSI Z400.1-1993
NIOSH RTECS provided by CHEM-BANK by SILVERPLATTER
Guide to Occupational Exposure Values 1996

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.