

MATERIAL SAFETY DATA SHEET

MSDS 0276

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

		HMIS CODES	
PRODUCT NAME	Fluxomatic Gel	Health	1
		Flammability	0
		Reactivity	0
PRODUCT CODES	74102, 74104	PPI	C
CHEMICAL FAMILY	Organic/Inorganic		
USE	Soldering Flux		
MANUFACTURER'S NAME	The RectorSeal Corporation	EMERGENCY TELEPHONE NO.	
	2601 Spenwick Drive	Chemtrec 24 Hours	
	Houston, Texas 77055 USA	(800) 424-9300	
VALIDATION DATE	March 1, 2008	TECHNICAL SERVICE TELEPHONE NO.	
REVISION DATE	March 1, 2006	(800) 231-3345	

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS
22	7646-85-7	Zinc Chloride	
		ACGIH TLV	1 mg/m3
		OSHA PEL	1 mg/m3
8	12125-02-9	Ammonium Chloride	
		ACGIH TLV	10 mg/m3
		OSHA PEL	10 mg/m3

Section 3 -- HAZARDS IDENTIFICATION

SUMMARY OF ACUTE HAZARDS

Solution is a corrosive irritant to eyes and skin. Soldering fumes may irritate eyes, nose, throat. Ingestion may cause intoxication, severe irritation of stomach, nausea, vomiting, and diarrhea.

ROUTE OF EXPOSURE, SIGNS AND SYMPTOMS

INHALATION

Irritation to respiratory system from fumes evolved during soldering.

EYE CONTACT

Corrosive to eyes and can cause severe damage.

SKIN CONTACT

Can cause chemical burns, irritation, and dermatitis.

INGESTION

Severe irritation to stomach and digestive system.

SUMMARY OF CHRONIC HAZARDS

Chemical dermatitis from continued skin contact. Continuous industrial Use in small unventilated areas may result in sufficient inhalation of solder and flux fumes to cause lung damage and irritation of respiratory tract.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

Section 4 -- FIRST AID MEASURES

If INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

If on SKIN: Immediately wash with soap and water. Remove and wash any contaminated clothing.

If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention if irritation persists.

If SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT LEL UEL
>400 F (204 C) SETA CC N/D N/D

EXTINGUISHING MEDIA

Non-flammable. Foam, dry chemical, carbon dioxide or water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained full face piece breathing apparatus and other protective clothing. Hazardous decomposition products possible (see Section 10). May release ZnO and HCl fumes.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Toxic fumes of zinc and chlorine may be produced in fire.

Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use absorbent materials to prevent footing hazard and to contain. Avoid flushing into sewers drains, waterways, and soil. Wear protective clothing during cleanup.

Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. Wash thoroughly after handling to remove all residue.

OTHER PRECAUTIONS: Avoid prolonged or repeated contact with skin or clothing. Empty containers may contain residues; treat as if full and observe all products precautions. Do not reuse empty containers.

Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined, poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air respirators during soldering operations until fumes have dissipated.

VENTILATION - LOCAL EXHAUST: Acceptable

SPECIAL: N/A

MECHANICAL (GENERAL): Acceptable

OTHER: N/A

PROTECTIVE GLOVES: Wear rubber gloves.

EYE PROTECTION: Safety glasses (ANSI Z-87.1 or equivalent)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Chemical resistant coveralls recommended.

WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: >212 F (100 C) @ 760mm Hg

SPECIFIC GRAVITY (H2O = 1): 1.26

VAPOR PRESSURE (mm Hg): N/D

MELTING POINT: N/A

VAPOR DENSITY (AIR = 1): N/A

EVAPORATION RATE (ETHYL ACETATE = 1): <0.01

APPEARANCE/ODOR: Yellow Gel / Slight Odor

SOLUBILITY IN WATER: Soluble

VOLATILE ORGANIC COMPOUNDS (VOC) Content
(Theoretical Percentage By Weight): 0% or (0 g/L)

Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None

INCOMPATIBILITY (MATERIALS TO AVOID): Aqueous solution reacts with bases, potassium.

HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes of zinc, chlorine, and HCl may be evolved during soldering.

HAZARDOUS POLYMERIZATION: Will not occur.

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Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS

No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

TOXICOLOGY DATA

Ingredient Name

Zinc Chloride

Oral-Rat LD50:350 mg/kg

Inhalation-Rat LCLo:1960 mg/m3/10M

Ammonium Chloride

Oral-Rat LD50:1650 mg/kg

Inhalation-Rat LC50:N/D

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Section 12 -- Ecological Information

ECOLOGICAL DATA

Ingredient Name

Zinc Chloride

Food Chain Concentration Potential None

WATERFOWL TOXICITY N/A

BOD None

AQUATIC TOXICITY: 7.2 ppm/96 hr/medium bluegill/TLm

Ammonium Chloride

Food Chain Concentration Potential None

WATERFOWL TOXICITY N/A

BOD N/A

AQUATIC TOXICITY: 6 ppm/96 hr/sunfish TLm

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Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: Corrosive liquid (D002). RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in accordance with all local, state and federal regulations.

Disposal Method: Neutralization

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Section 14 -- TRANSPORTATION INFORMATION

DOT: Corrosive liquid, acidic, inorganic, n.o.s. (contains Zinc Chloride & Ammonium Chloride), Class 8, UN3264, PG III, ERG #154 Gallons and less: Consumer Commodity, ORM-D

OCEAN (IMDG): Corrosive liquid, acidic, inorganic, n.o.s. (contains Zinc Chloride & Ammonium Chloride), UN3264, PG III, IMDG#8147-1, EMS#8-15, MFAG#760

AIR (IATA): Corrosive liquid, acidic, inorganic, n.o.s. (contains Zinc Chloride & Ammonium Chloride), Class 8, UN3264, PG III, ERG #154

WHMIS (CANADA): Class E

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Section 15 -- REGULATORY INFORMATION

REGULATORY DATA

Ingredient Name

Zinc Chloride

SARA 313 Yes

TSCA Inventory Yes

CERCLA RQ 1000 lb.

RCRA Code	N/A
Ammonium Chloride	
SARA 313	No
TSCA Inventory	Yes
CERCLA RQ	N/A
RCRA Code	N/A

Section 16 -- OTHER INFORMATION

This document is prepared pursuant to the OSHA Hazard Communication Standard (29 CFR 1910.1200). The information herein is given in good faith, but no warranty, expressed or implied is made. Consult RectorSeal for further information: (713) 263-8001