

Raychem

MATERIAL SAFETY DATA SHEET

Issue No.: 4

Effective Date: December 1995

Serial No.: RAY/3131

PRODUCT IDENTIFICATION

Product Name:	Raychem S-1255-02	Chemical Name:	Not applicable, mixture
		CAS #:	Not applicable, mixture
		DOT Proper Shipping Name:	Not regulated
Manufacturer:	Raychem Corporation 300 Constitution Drive Menlo Park, CA 94025	DOT Identification No.:	Not regulated
		DOT Hazard Classification:	Not regulated
		TSCA Inventory Status:	All ingredients are listed

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE or ACCIDENT

Call CHEMTREC - Day or Night - 1-800-424-9300 Toll free in the continental U.S., Hawaii, Puerto Rico, Canada, Alaska or Virgin Islands. For calls originating elsewhere: (703) 527-3887 (collect calls accepted)

For non-emergency health and safety information, call: (650) 361-4907

HAZARDOUS INGREDIENTS

Proprietary Ingredient (CAS # Proprietary); Bisphenol A/Epichlorohydrin Epoxy Resin (CAS # 25068-38-6); Cyanoguanidine (CAS # 461-58-5)

PHYSICAL PROPERTIES

Appearance and Odor: Black tape. Slight odor.

Boiling Point:	Not applicable	Vapor Pressure (mm Hg @ 25°C):	Not applicable
Volatility (% by volume):	Negligible	Vapor Density:	Not applicable
Specific Gravity (Water = 1):	1.2 g/cc	Evaporation Rate:	Negligible
Flash Point/Method:	Not applicable	Solubility in Water (%):	Negligible
Flammable Limits in Air (volume%): lower <u>Not established</u> upper <u>Not established</u>			

HEALTH HAZARD INFORMATION

Exposure Limits:	Proprietary Ingredient:	None established
	Bisphenol A/ Epichlorohydrin Epoxy Resin:	None established
	Cyanoguanidine:	None established

Health Effects/Symptoms of Exposure:

The information presented below corresponds to the individual components of this product. Toxicity studies have not been performed on the mixture as a whole.

Acute (Short-Term Exposure):

- Eye Contact:** This product is an eye irritant. Direct contact or exposure to vapors or mists may cause stinging, tearing, redness, and swelling. Persons with pre-existing eye disorders may be more susceptible to the effects of this product.
- Skin Contact:** This product is a skin irritant. Direct contact may cause redness and burning and skin damage. Repeated contact may cause an allergic skin reaction in sensitized individuals. Persons with pre-existing skin disorders may be more susceptible to the effects of this product. No harmful effects have been demonstrated in skin absorption studies conducted on the individual ingredients of this product.
- Ingestion (Swallowing):** Ingestion of cyanoguanidine (a minor component of this product) has been associated with a disorder of the oxygen-carrying capacity of the blood (methemoglobinemia). Such a condition is highly unlikely to occur due to the low concentration of cyanoguanidine in this product (i.e., ingestion of large quantities of this product would be necessary to put a person at risk of experiencing this disorder).
- Inhalation (Breathing):** Heated material may produce inhalable vapors. Breathing such vapors may cause irritation of the respiratory tract, nausea and headache. Persons with pre-existing lung disorders (e.g., asthma condition) may be more aggravated by exposure to heated material.

Chronic (Long-Term Exposure):

The ingredients of this product, present at equal to or greater than 0.1% of this product, are not listed by OSHA, NTP, or IARC as suspect carcinogens. A component of this product (Bisphenol A/Epichlorohydrin Epoxy Resin) is positive in *in vitro* microbial mutagenicity screening tests and has produced chromosomal aberrations in cultured rat liver cells. The relevance of these findings to humans is uncertain.

STORAGE, HANDLING, AND PREVENTATIVE MEASURES

Stability at room temperature: Stable for a year at 23°C (74°F).

Conditions to Avoid: Avoid storage temperatures above 100°C.

Incompatibilities: Avoid contact with strong oxidizers, acids and bases. Reaction with some curing agents may produce considerable heat. Run-a-way cure reactions may char and decompose resin system.

Hazardous Polymerization: Will not occur. Polymerization will occur at temperatures above 100°C (212°F).

Thermal Degradation and Combustion Byproducts: Degradation and combustion byproducts may be toxic and should not be inhaled. Thermal degradation is not significant at temperatures achieved during proper application, as directed by product instructions. At temperatures above 300°C, or most significantly if these products are burned, the thermal degradation products may include, but are not limited to, carbon monoxide, carbon dioxide, other hydrocarbons, oxides of nitrogen, hydrogen cyanide, aldehydes, acids, ammonia, and trace levels of orthodichlorobenzene and phenol.

Handling: Avoid contact with eyes, skin and clothing. Wash clothing before reuse. Avoid breathing vapors from heated material. Installation of product should be done in a well ventilated area. Wash thoroughly after handling.

Other Precautions: Prevent skin and eye contact and avoid unnecessary inhalation of vapors from heated material. Containers, even those that have been emptied, can contain hazardous product residues. Handle in accordance with the precautions outlined in the Handling Section above. Protect containers from physical damage to avoid leaks and spills.

Storage: Keep away from heat and flame. Store in a cool, dry, well-ventilated area in closed containers. Keep container closed.

Ventilation: In accordance with good industrial hygiene practice, ensure adequate ventilation during application.

Respiratory Protection: At normal application temperatures, respiratory protection is not needed. If product is heated to degradation or combustion, assume fumes are toxic and use self-contained breathing apparatus.

Protective Clothing: Use eyewear and impervious gloves to prevent contact, as appropriate to the given operation.

Disposal: Dispose of in accordance with all local, state and federal regulations. This material is not considered a hazardous waste according to Federal EPA standards. Classification according to state and local standards is required before disposal.

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Holding eyelids apart, flush affected eye(s) immediately with clean water for at least 15 minutes. Seek immediate medical attention.

Skin: Immediately wash affected area(s) with plenty of soap and water. Remove contaminated clothing and shoes. Seek immediate medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

Ingestion: Not a normal route of exposure. However, if swallowed and symptoms develop, seek medical attention.

Inhalation: If respiratory symptoms or other symptoms of exposure develop, move victim to fresh air. If symptoms persist, seek medical attention. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. Keep victim warm and quiet; seek immediate medical attention.

Steps to be Taken in Case of Release or Spill: Wear appropriate personal protection when responding. This material may be picked up or scooped up and collected in plastic bags. Dispose in accordance with local, state and federal regulations.

Unusual Fire and Explosion Hazards: Toxic fumes may be given off in a fire. See sections on Thermal Degradation and Combustion Byproducts and Other Precautions.

Special Fire Fighting Procedures: Firefighters should wear self-contained breathing apparatus with full facepiece operated in the positive pressure demand mode when fighting fires.

Extinguishing Media: carbon dioxide water dry chemical foam other

This information is supplied in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200) and the California Safe Drinking Water and Toxics Enforcement Act of 1986 (California Health & Safety Code 25249.6). Users are advised that they may have additional disclosure obligations under other federal, state, and local laws. Users are advised to ensure that this information is brought to the attention of the employees, agents, or contractors handling this product. Distributors of this product are advised to forward this document, or the information contained herein, to their purchaser. Raychem makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use. Raychem's obligations shall be only as set forth in Raychem's standard terms and conditions of sale for this product and in no case will Raychem be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. Users of Raychem products should make their own evaluation to determine the suitability of each such product for the specific application and to establish safe handling and installation procedures.

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Date: December 1995