Raychem
MATERIAL SAFETY DATA SHEET

Issue No: 2 **Effective Date:** August 1997 **Serial No.**: RAY/4565

PRODUCT IDENTIFICATION

Product Name: S-1189 Stress Relief Material (SRM)

Manufacturer: **Raychem Corporation**
300 Constitution Drive
Menlo Park, CA 94025

Chemical Name: Not applicable, mixture
CAS #: See ingredients section below.
DOT Proper Shipping Name: Not regulated
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

S-1189 Stress Relief Material is not hazardous during proper installation, but may emit hazardous thermal decomposition and combustion byproducts if overheated to degradation. See "Thermal Degradation and Combustion Byproduct" section of this MSDS for more specific information. Base polymer materials include epichlorohydrin polymers.

PRODUCT IDENTIFICATION

S-1189 Stress Relief Material is a mastic used for stress relief on high voltage splices and terminations.

PHYSICAL PROPERTIES

Appearance and Odor: Yellow solid tape. Slight odor.

Boiling Point: Not applicable

Melting Point: Not applicable

Volatility: Not applicable

Specific Gravity: 1.45

Vapor Pressure(mm Hg @ 20°C): Not applicable

Evaporation Rate: Not applicable

Vapor Density: Not applicable

Solubility in Water: Insoluble

Flash Point (°F)/Method: Not applicable

Flammable Limits in Air (volume %): **Lower** Not applicable **Upper** Not applicable

HEALTH HAZARD INFORMATION

Exposure Limits: There are no established exposure limits for epichlorohydrin polymer mixtures.

Health Effects/Symptoms of Exposure:

Acute (Short-Term Exposure):

Eye Contact: Contact with molten material may cause thermal burns.

Skin Contact: This product is not expected to be a skin irritant. Contact with the molten material may cause thermal burns. No harmful effects are expected from skin absorption of this product.

Ingestion (Swallowing): Ingestion of this product is highly unlikely. There is insufficient information available on this material to predict the effects from ingestion.

Inhalation (Breathing): In common with most organic materials, thermal degradation and combustion byproducts may be toxic and should not be inhaled. (See Comments below and the Thermal Degradation and Combustion Byproducts Section for more specific information.)

Chronic (Long-Term Exposure):

None of the ingredients to which users may be exposed and which are present at equal to or greater than 0.1% of the product, are listed by OSHA, NTP, or IARC as suspect carcinogens.

Comments: Overheating the product to charring or burning may produce vapors that may cause eye, skin, nose and throat irritation. Persons with pre-existing eye, skin, or respiratory disorders (e.g., asthma conditions) may be more susceptible to the effects of these vapors.

California Proposition 65: WARNING: This material contains a maximum of 0.0002% (2 ppm) acrylonitrile and 0.00005% (0.5 ppm) butadiene which are known to the State of California to cause cancer. This material contains a maximum of 0.00002% (0.2 ppm) ethylene oxide which is known to the State of California to cause cancer, and to cause birth defects or other reproductive harm. This warning is provided in accordance with the provisions of California Health & Safety Code 25249.6.

STORAGE, HANDLING, AND PREVENTIVE MEASURES

Stability at room temperature: This product is stable under normal conditions.

Conditions to Avoid: Avoid overheating of product.

Incompatibilities (Materials to Avoid): Strong oxidizers, acids and reducing agents.

Hazardous Polymerization: Will not occur. No known polymerization conditions to avoid.

Thermal Degradation and Combustion Byproducts: In common with most organic materials, degradation and combustion byproducts may be toxic and should not be inhaled. Thermal degradation is not significant at temperatures achieved during proper installation, as directed by product installation guides. At temperatures higher than those recommended for proper installation, most significantly if the product burns, the thermal degradation and combustion byproducts may include, but are not limited to, carbon monoxide, carbon dioxide, hydrogen chloride, carboxylic acids, ketones, hydrogen cyanide, and chlorinated, aromatic and aliphatic hydrocarbons.

Handling: Avoid any vapors given off if the product is heated to decomposition, as shown by a darkening and browning. Avoid contact with molten material. Heat-resistant gloves are required if hot products are handled after installation. Do not consume food, beverages or tobacco in the immediate work area. Wash hands before eating, drinking or smoking.

Other Precautions: Avoid heating this product beyond temperatures required for normal installation. See installation instructions for proper installation procedures. If product chars or burns, immediately stop heating. Avoid inhaling any fumes which may be given off under such circumstances. Allow any vapors to disperse and ventilate before continuing work in the area.

Storage: Store in a cool, dry well-ventilated area.

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

Respiratory Protection: If installation occurs in a confined, unventilated area, or if product is overheated to degradation, NIOSH/MSHA-approved air-supplied respirators are recommended.
Protective Clothing: OSHA, ANSI, or NIOSH guidelines should be followed. If there is a danger of molten material contacting the skin or eyes, use eye/face protection and heat resistant gloves. If it is necessary to handle grossly overheated or fire-damaged products, wear natural rubber gloves to prevent possible contact with potentially corrosive inorganic acid residues.

Disposal: Classification according to all federal, local and state hazardous waste regulations is required before disposal. This material should not be incinerated unless there are provisions for absorbing hydrogen chloride.

Installation: Follow appropriate Raychem installation instructions and application guides to ensure that installation is performed properly. Ensure that any local requirements/legislation concerning the use of hand-held electrical equipment are observed.

EMERGENCY AND FIRST AID PROCEDURES

Eyes: If eye irritation occurs, hold eyelids apart and flush affected area(s) with clean water. Seek medical attention.

Skin: First aid is normally not required. After handling product, it is good work practice to wash your hands. If molten material contacts skin, cool area immediately in water. DO NOT attempt to remove material from the skin. Treat as a burn, and seek medical attention.

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 then sweep up and collect in a suitable container for disposal or reuse.

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

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

Extinguishing Media: carbon dioxide X **water** X **dry chemical** X **foam** X **other** ___
Selection of extinguishing media should be based upon the size of the fire, the firefighting training/experience of the individual attempting to extinguish or control the fire, and the packaging materials exposed to the fire.

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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