



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

**Product Name:** Poly(dimethylamine-co-epichlorohydrin), quarternized  
**Catalog Number(s):** 652 **Molecular Formula:** (C<sub>3</sub>H<sub>5</sub>ClO.C<sub>2</sub>H<sub>7</sub>N)<sub>x</sub>  
**Company:** Scientific Polymer Products, Inc.  
6265 Dean Parkway  
Ontario, NY 14519  
**Telephone:** 585/265-0413  
**Fax:** 585/265-1390  
**Website:** www.scipoly.com  
**Emergency Phone Number:** 800-255-3924 (CHEM TEL)

Section 2: Hazards Identification

Classification of the substance or mixture

**GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)**  
Skin sensitization, Category 1

GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)  
H317 May cause an allergic skin reaction.

Precautionary statement(s)  
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/spray.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P281 Use personal protective equipment as required.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P333+P313 If skin irritation or rash occurs: get medical advice/attention.  
P363 Wash contaminated clothing before reuse.  
P405 Store locked up.  
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – none

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

### Section 3: Composition/Information on Ingredients

| Ingredient   | CAS Number | Concentration (%) |
|--|------------|-------------------|
| Poly(dimethylamine-co-epichlorohydrin), quarternized | 25988-97-0 | 60-65%            |
| Water  | 7732-18-5  | 35-40%            |

### Section 4: First Aid Measures

#### Description of first aid measures

##### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

##### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

##### In case of skin contact

Wash off with soap and plenty of water. If skin irritation occurs, consult a physician.

##### In case of eye contact

Flush eyes with plenty of water for 15 minutes. Get medical attention immediately if irritation develops and persists.

##### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediate medical attention required.

##### Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

##### Indication of any immediate medical attention and special treatment needed

No data available

### Section 5: Fire-Fighting Measures

#### Suitable extinguishing media

Use water spray, dry chemical or carbon dioxide.

#### Special hazards arising from the substance or mixture

Carbon oxides

#### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### Further information

Use water spray to cool unopened containers

### Section 6: Accidental Release Measures

#### Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

#### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in

### Reference to other sections

For disposal see section 13.

## Section 7: Handling and Storage

### Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.  
For precautions see section 2.

### Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep container closed.

Storage stability:

Storage temperature:  $\geq 0^{\circ}\text{C}$

Avoid freezing

Protect from temperatures below:  $0^{\circ}\text{C}$

Frost sensitive

### Specific end use(s)

Laboratory chemicals, Manufacture of substances

## Section 8: Exposure Controls/Personal Protection

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

### Personal protective equipment

#### Eye/face protection

Face shield and safety glasses, chemical splash goggles. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### Body Protection

Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## Section 9: Physical and Chemical Properties

### Information on basic physical and chemical properties

- |    |                |                   |
|----|----------------|-------------------|
| a) | Appearance     | Form: Liquid      |
| b) | Odor           | Mild              |
| c) | Odor Threshold | No data available |

|    |   |                   |
|----|---|-------------------|
| d) | pH                                      | No data available |
| e) | Melting point/freezing point            | No data available |
| f) | Initial boiling point and boiling range | No data available |
| g) | Flash point                             | No data available |
| h) | Evaporation rate                        | No data available |
| i) | Flammability (solid, gas)               | No data available |
| j) | Flammability or explosive limits        |                   |
|    | Upper                                   | No data available |
|    | Lower                                   | No data available |
| k) | Vapor pressure                          | No data available |
| l) | Vapor density                           | No data available |
| m) | Relative density                        | No data available |
| n) | Water solubility                        | Soluble           |
| o) | Partition coefficient: n- octanol/water | No data available |
| p) | Auto-ignition temperature               | No data available |
| q) | Decomposition temperature               | No data available |
| r) | Viscosity                               | No data available |
| s) | Explosive properties                    | No data available |
| t) | Oxidizing properties                    | No data available |

**Other safety information**

No data available

**Section 10: Stability and Reactivity**

**Reactivity**

No dangerous reaction known under conditions of normal use

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

Stable under recommended storage conditions.

**Conditions to avoid**

Avoid extreme temperatures. Avoid freezing.

**Incompatible materials**

Reactive chemicals, strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products- When handled and stored appropriately, no dangerous decomposition products are known.

In the event of fire: see section 5

**Section 11: Toxicological Information**

**Information on toxicological effects**

**Acute toxicity**

Oral: LD50(rat)  
Value:>2,000 mg/kg

**Skin corrosion/irritation**

Assessment of irritating effects: Not irritating to eyes and skin

Species: Rabbit

Result: Non-irritant

**Serious eye damage/eye irritation**

Species: Rabbit

Result: Non-irritant

**Respiratory or skin sensitization**

Assessment of sensitization: Based on the ingredients, there is no suspicion of a skin sensitizing potential.

**Germ cell mutagenicity**

No data available

**Carcinogenicity**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**

No data available

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

Assessment of repeated dose toxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses. The product has not been tested. The statement has been derived from the properties of the individual components.

Experimented/calculated data: Not evaluated

**Aspiration hazard**

No aspiration hazard expected

**Additional Information**

RTECS: Not available

**Section 12: Ecological Information****Toxicity**

LC50 (96h) > 10 mg/l, Fish

**Persistence and degradability**

The polymer component of the product is poorly biodegradable

**Bioaccumulative potential**

No data available

**Mobility in soil**

Absorption to solid soil phase is expected

**Results of PBT and vPvB assessment**

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

**Other adverse effects**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**Section 13: Disposal Considerations****Waste treatment methods****Product**

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional and national hazardous waste regulations to ensure complete and accurate classification.

**Contaminated packaging**  
Dispose of as unused product.

### Section 14: Transport Information

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

### Section 15: Regulatory Information

**SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

Poly(dimethylamine-co-epichlorohydrin), quarternized

CAS No.  
25988-97-0

**Pennsylvania Right To Know Components**

Poly(dimethylamine-co-epichlorohydrin), quarternized

CAS No.  
25988-97-0

**New Jersey Right To Know Components**

Poly(dimethylamine-co-epichlorohydrin), quarternized

CAS No.  
25988-97-0

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### Section 16: Other Information

**HMIS Rating**

Health: 1  
Flammability: 1  
Reactivity: 0

**NFPA Rating**

Health: 1  
Flammability: 0  
Reactivity: 0

This material is intended for laboratory use only. It is not sold or intended for drug, household or other uses. The information represents the most accurate and complete data currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.