SAFETY DATA SHEET

Revision Date: 11/13/23

Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Poly(dimethylamine-co-epichlorohydrin), quarternized

Catalog Number(s): 652 **Molecular Formula:** $(C_3H_5ClO.C_2H_7N)_x$

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	35-40%
Water	7732-18-5	60-65%

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: >=0° C
Avoid freezing
Protect from temperatures below: 0° 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 biodegradeable

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

	CAS No.
Poly(dimethylamine-co-epichlorohydrin), quarternized	25988-97-0

Pennsylvania Right to Know Components

	CAS No.
Poly(dimethylamine-co-epichlorohydrin), quarternized	25988-97-0

New Jersey Right to Know Components

	CAS No.
Poly(dimethylamine-co-epichlorohydrin), quarternized	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		**NFPA Rating**	
Health:	1	Health:	1
Flammability:	1	Flammability:	0
Reactivity:	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.