## **SAFETY DATA SHEET**

Revision Date: 08/09/24

## **Section 1: Identification**

## PRODUCT AND COMPANY INFORMATION

**Product Name:** Polyethyleneimine **Molecular Formula:**  $(C_2H_5N)_x$ 

Catalog Number(s): 135

**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)

Acute toxicity, Oral, Category 4, H302 Eye irritation, Category 2A, H319 Skin sensitization, Category 1, H317 Acute aquatic toxicity, Category 2, H401 Chronic aquatic toxicity, Category 2, H411

#### GHS Label elements, including precautionary statements

**Pictogram** 



Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release into the environment.

P280 Wear protective gloves/eye protection/ face protection.

P301+P312+P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse

mouth.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 If eye irritation persists: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

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 (%)
Polyethyleneimine	9002-98-6	100

## **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 inhaled, remove victim to fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Rinse thoroughly with plenty of water. Consult a physician.

## In case of eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# 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, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Carbon oxides, Nitrogen oxides (NOx)

## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## **Further information**

No data available.

## **Section 6: Accidental Release Measures**

# Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe 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

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 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.

Storage class (TRGS 510): Non Combustible Liquids

## Specific end use(s)

Laboratory chemicals, Manufacture of substances

## Section 8: Exposure Controls/Personal Protection

# **Control parameters**

## Components with workplace control parameters

Contains no substances with occupational exposure limit values.

## **Exposure controls**

## **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

# Personal protective equipment

# **Eye/face protection**

Face shield and safety glasses. 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. 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 multipurpose 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 or 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	Product specific
c)	Odor Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available

g) Flash point >110° C (230° F)- Closed cup h) Evaporation rate No data available

h) Evaporation rate No data available
i) Flammability (solid, gas) No data available
j) Upper/lower flammability or No data available
explosive limits

k) Vapor pressure No data available No data available m) Relative density No data available

n) Water solubility Miscible

o) Partition coefficient: n- octanol/water 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 data available.

#### Chemical stability

Stable under recommended storage conditions.

## **Conditions to avoid**

No data available.

## **Incompatible materials**

Strong oxidizing agents

## **Hazardous decomposition products**

No data available.

In the event of fire: see section 5

# **Section 11: Toxicological Information**

# Information on toxicological effects

## **Acute toxicity**

LD50 Oral – Rat ->500 -<2,000mg/kg (OECD Test Guideline 423)

Inhalation: No data available

Dermal: No data available

## Skin corrosion/irritation

Skin-Rabbit

Result: No skin irritation (OECD Test Guideline 404)

## Serious eye damage/eye irritation

**Eves- Rabbit** 

Result: Irritating to eyes (OECD Test Guideline 405)

#### Respiratory or skin sensitization

Maximization Test (GPMT) –Guinea Pig May cause allergic skin reaction (OECD Test Guideline 406)

## 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

No data available

#### Aspiration hazard

No data available

# **Additional Information**

RTECS: TQ7917000

To the best of our knowledge, the chemical, physical and toxicological properties have not been thoroughly investigated.

## **Section 12: Ecological Information**

**Toxicity** 

Toxicity to fish LC50-Danio rerio (Zebra fish)-7.2 mg/l-96.0 h

(OECD Test Guideline 203)

Toxicity to daphnia and

Other aquatic invertebrates

Static test EC50- Daphnia magna (Water flea) 8.84 mg/l-48 h

(OECD Test Guideline 202)

Persistence and degradability

Biodegradability Result- According to the results of tests of biodegradability this product is not

Readily biodegradable. (OECD Test Guideline 302B)

**Bioaccumulative potential** 

No data available

Mobility in soil

No data available

## 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. Toxic to aquatic life with long lasting effects.

## **Section 13: Disposal Considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

## Contaminated packaging

Dispose of as unused product.

# **Section 14: Transport Information**

## DOT (US)

Not dangerous goods

**IMDG** 

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally Hazardous Substance, liquid, n.o.s. (Polyethyleneimine)

Marine pollutant: Yes

**IATA** 

UN number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally Hazardous Substance, liquid, n.o.s. (Polyethyleneimine)

## 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

Polyethyleneimine

## **Massachusetts Right to Know Components**

No components are subject to the Massachusetts Right to Know Act.

## **Pennsylvania Right to Know Components**

CAS-No. 9002-98-6

**New Jersey Right to Know Components** 

CAS-No.

Polyethyleneimine 9002-98-6

# 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 RatingNFPA RatingHealth:2Health:2Flammability:0Flammability:0Reactivity:1Reactivity: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.