

**SAFETY DATA SHEET**

Revision Date: 07/22/25

Section 1: Identification**PRODUCT AND COMPANY INFORMATION**

Product Name: Poly(N-vinyl caprolactam) **Molecular Formula:** (C₈H₁₃NO)_x

Catalog Number(s): 1102

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**

Not a hazardous substance or mixture.

GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

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(N-vinyl caprolactam) | 25189-83-7 | 100 |

Section 4: First Aid Measures**Description of first aid measures****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. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if effects occur.

If swallowed

Never give anything by mouth to an unconscious person. May cause gastrointestinal blockage. Do not induce vomiting unless directed to do so by medical personnel. 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**

Water. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers.

Special hazards arising from the substance or mixture

During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide. Phenolic compounds.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary. Keep people away. Isolate fire and deny unnecessary entry. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone. Hand held dry chemical or carbon dioxide extinguishers may be used for small fires.

Further information

No data available

Section 6: Accidental Release Measures**Personal precautions, protective equipment and emergency procedures**

Spilled material may cause a slipping hazard. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and materials for containment and cleaning up

Contain spilled material if possible. Sweep up. Collect in suitable and properly labeled containers.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage**Precautions for safe handling**

No smoking, open flames or sources of ignition in handling and storage area. Good housekeeping and controlling of dusts are necessary for safe handling of product. Avoid breathing process fumes. Use with adequate ventilation. When appropriate, unique handling information for containers can be found on the product label. Workers should be protected from the possibility of contact with molten resin. Do not get molten material in eyes, on skin or clothing. Pneumatic conveying and other mechanical handling operations can generate combustible dust. To reduce the potential for dust explosions, electrically bond and ground equipment and do not permit dust to accumulate. Dust can be ignited by static discharge. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Keep in a dry place.

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Restrictions on Use

Not for drug or household use

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**

General industrial hygiene practice.

Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

Personal protective equipment**Eye/face protection**

Safety glasses with side shields. 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

Impervious 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

For nuisance exposures use type P95 (US) or type P1 (EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

| | | |
|----|--|----------------------|
| a) | Appearance | Form: Powder |
| b) | Odor | Slight odor |
| 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) | Upper/lower flammability or explosive limits | 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 (cold water) |
| 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 data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Polymerization will not occur.

Conditions to avoid

Avoid temperatures above 425 °C. Exposure to elevated temperatures can cause product to decompose.

Incompatible materials

None known.

Hazardous decomposition products

Other decomposition products - Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Fumes can be irritating. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide. Aromatic compounds. Hydrocarbons. Phenolics. Polymer fragments.

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available

Dermal: The dermal LD50 has not been determined. Typical for this family of materials. Estimated. LD50, rabbit > 2,000 mg/kg

Ingestion: Single dose oral LD50 has not been determined. Typical for this family of materials. Estimated. LD50, rat > 5,000 mg/kg

Skin corrosion/irritation

Prolonged contact is essentially nonirritating to skin. Mechanical injury only. Under normal processing conditions, material is heated to elevated temperatures; contact with the material may cause thermal burns.

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

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: Not available

Section 12: Ecological Information**Toxicity**

Not expected to be acutely toxic, but material in pellet or bead form may mechanically cause adverse effects if ingested by waterfowl or aquatic life.

Persistence and degradability

This water-insoluble polymeric solid is expected to be inert in the environment. Surface photodegradation is expected with exposure to sunlight. No appreciable biodegradation is expected.

Bioaccumulative potential

No bioconcentration is expected because of the relatively high molecular weight (MW greater than 1000).

Mobility in soil

In the terrestrial environment, material is expected to remain in the soil., In the aquatic environment, material will sink and remain in the sediment.

Results of PBT and vPvB assessment

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

Other adverse effects

No data available

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

Offer surplus and non-recyclable solutions to a licensed disposal company.

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

No SARA Hazards

Massachusetts Right to Know Components

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

Pennsylvania Right to Know Components

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

New Jersey Right to Know Components

No components are subject to the New Jersey Right to Know Act.

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: 1

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.