SAFETY DATA SHEET

Revision Date: 3/19/20

Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: N-Vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymer, quaternized

Molecular Formula: $(C_8H_{15}NO_2.C_6H_9NO)_x.xC_4H_{10}O_4S$

Catalog Number(s): 372

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 (%)
Water	7732-18-5	80
N-Vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymer, quaternized	53633-54-8	20

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.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Treat symptomatically. Consult a doctor/physician if symptoms persist.

In case of skin contact
Wash with soap and water. Get medical attention if symptoms occur.

In case of eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses if any. Protect unharmed eye. Get medical attention if symptoms occur.

If swallowed
Never give anything by mouth to an unconscious person. If symptoms persist, call 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, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture
No hazardous combustion products are known.

Advice for firefighters
Wear self-contained breathing apparatus and protective clothing for firefighting if necessary. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Further information
If product is heated above its flash point it will produce vapors sufficient to support combustion. Vapors are heavier than air and may travel along the ground and be ignited by heat, pilot lights, other flames and ignition sources at locations near the point of release.
Do not allow run off from fire fighting to enter drains or water courses.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas.
For personal protection see section 8.

Environmental precautions
Do not let products enter drains. Prevent further leakage or spillage if safe to do so.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material and dispose of as a 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 prolonged or repeated contact with skin. Use with adequate ventilation. Wash thoroughly after handling. Container hazardous when empty. Smoking, eating and drinking should be prohibited in the application area.

Conditions for safe storage, including any incompatibilities
Store in a closed container in a dry and cool area. Keep away from heat and sources of ignition. Keep away from food, drink, and animal feeding stuffs. 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.

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. Good ventilation should be sufficient. Typically 10 air changes per hour should be used; ventilation rates should be matched to conditions. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection
Wear safety glasses with side shields or 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
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
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
Do not let product enter drains

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Liquid
b)	Odor	Odorless
c)	Odor Threshold	No data available
d)	pH	7.0 – 8.5
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
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
Hazardous polymerization will not occur.

Conditions to avoid
None known

Incompatible materials
None known

Hazardous decomposition products
Other decomposition products - No data available
In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity
Acute oral toxicity: LD 50 (Rat): >5,000 mg/kg

Skin corrosion/irritation
Species: Rabbit
Result: Not irritating to skin

Serious eye damage/eye irritation
Species: Rabbit
Result: Not irritating to eyes
Remarks: Unlikely to eye irritation or injury

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

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 (Oncorhynchus mykiss (rainbow trout)): 4.47 mg/l

Toxicity to daphnia and other aquatic invertebrates: EC50 (Water flea (Daphnia magna)): 177.1 mg/l
Exposure time: 48 h

Persistence and degradability
Biodegradability: Remarks: Not readily biodegradable

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 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
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

	CAS-No.
Water	7732-18-5
N-Vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymer, quaternized	53663-54-8

New Jersey Right To Know Components

	CAS-No.
Water	7732-18-5
N-Vinyl pyrrolidone/dimethylaminoethyl methacrylate copolymer, quaternized	53663-54-8

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:	0	Health:	0
Flammability:	1	Flammability:	1
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.