



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Poly(acrylic acid) **Molecular Formula:** (C₃H₄O₂)_x

Catalog Number(s): 026, 026C, 597, 598, 599, 600, 1027

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)
Germ cell mutagenicity, Category 1B, H340
Carcinogenicity, Category 1A, H350

GHS Label elements, including precautionary statements
Pictogram



Signal word

Danger

Hazard statement(s)

H340 May cause genetic defects.
H350 May cause cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P308+P313 IF exposed or concerned: Get medical advice/attention.
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(acrylic acid)	9003-01-4	99.0 – 99.8%
Benzene	71-43-2	0.1 – 0.5%
Acrylic acid	79-10-7	0.1 – 0.5%

Section 4: First Aid Measures

Description of first aid measures

General advice

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

If inhaled

If breathed in, move person into fresh. 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

Flush eyes with water as a precaution

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

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. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

Environmental precautions

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

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable closed containers for disposal according to local regulations (see section 13)

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid formation of dust and aerosols. Avoid breathing dust. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

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

Maximum storage temperature < 80° C (176° F)

Storage class (TRGS 510): Non-combustible, acute toxic Cat. 3/ toxic hazardous materials or hazardous materials causing chronic effects

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection**Exposure Guidelines**

Chemical name	Type	Exposure Limit Values	Source
Benzene	TWA	0.5 ppm	US. ACGIH Threshold Limit Values (TLV)
Benzene	STEL	2.5 ppm	US. ACGIH Threshold Limit Values (TLV)
Benzene	REL	0.1 ppm	US. NIOSH; Pocket Guide to Chemical Hazards
Benzene	STEL	1 ppm	US. NIOSH; Pocket Guide to Chemical Hazards
Benzene	TWA	1 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Benzene	STEL	5 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Benzene	OSHA_ACT	0.5 ppm	US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
Benzene	TWA	10 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000)
Benzene	Ceiling	25 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000)
Benzene	Max. Conc.	50 ppm	US. OSHA Table Z-2 (29 CFR 1910.1000)
Acrylic acid	TWA	2 ppm	US. ACGIH Threshold Limit Values (TLV)
Acrylic acid	REL	2 ppm 6 mg/m3	US. NIOSH; Pocket Guide to Chemical Hazards

Other exposure limits

Chemical name	Type	Exposure Limit Values	Source
2-Propenoic acid, homopolymer	TWA	0.05 mg/m3	

Biological Limit Values

Chemical name	Exposure Limit Values	Source
Benzene (t,t-Muconic acid: Sampling time: End of shift)	500 µg/g (Creatinine in urine)	ACGIH BEI
Benzene (S-Phenylmercapturic acid: Sampling time: End of shift)	25 µg/g (Creatinine in urine)	ACGIH BEI

Exposure controls**Appropriate engineering controls**

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

Personal protective equipment**Eye/face protection**

Safety glasses with side shields conforming to EN166. 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 type N100(US) or type P3 (EN 143) 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.

Section 9: Physical and Chemical Properties**Information on basic physical and chemical properties**

a)	Appearance	Form: Solid
b)	Odor	Slightly acetic
c)	Odor Threshold	No data available
d)	pH	2.5 – 3 (1% water)
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	Material will swell in water
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	Approx. 896° F (480° C)
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

Will not occur

Conditions to avoid

Static discharge. Moisture. Heat.

Incompatible materials

Strong oxidizing agents, Strong bases

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**

LD50 Oral – Rat - 2,500 mg/kg

Inhalation: Avoid inhalation of dust.

Dermal: No data available

Skin corrosion/irritation

Skin- Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Eyes- Rabbit

Result: No eye irritation

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: 1 – Group 1: Carcinogenic to humans (Benzene)

IARC: 3 – Group 3: Not classifiable as to its carcinogenicity to humans (Poly(acrylic acid))

NTP: Known to be human carcinogen (Benzene)

OSHA: OSHA specifically regulated carcinogen (Benzene)

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.

Stomach – Irregularities – Based on Human Evidence

Stomach – Irregularities – Based on Human Evidence (Benzene)

Section 12: Ecological Information**Toxicity**

No data available

Persistence and degradability

No data available

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

No data available

Section 13: Disposal Considerations

Waste treatment methods

Product

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

The following components are subject to reporting levels established by SARA Title III, Section 313:

Benzene CAS No. 71-43-2

SARA 311/312 Hazards

Delayed (Chronic) Health Hazard

Massachusetts Right To Know Components

Benzene CAS No. 71-43-2

Pennsylvania Right To Know Components

Acrylic acid	CAS No.
	79-10-7
Benzene	71-43-2

New Jersey Right To Know Components

Acrylic acid	CAS No.
	79-10-7
Benzene	71-43-2

California Prop. 65 Components

WARNING This product contains a chemical known to the State of California to cause birth defects or other reproductive harm

Benzene CAS No. 71-43-2

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.