



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Poly(2-(2-ethoxyethoxy) ethyl acrylate), solution in toluene
Catalog Number(s): 890 **Molecular Formula:** (C₉H₁₆O₄)_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)

Flammable liquids, Category 2, H225
Skin irritation, Category 2, H315
Reproductive toxicity, Category 2, H361
Specific target organ toxicity- single exposure, Category 3, Central nervous system, H336
Specific target organ toxicity- repeated exposure, Category 2, H373
Aspiration hazard, Category 1, H304

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H225 Highly flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.

Precautionary statement(s)

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.

| | |
|----------------|---|
| P260 | Do not breathe dust/fumes/gas/mist/vapors/spray. |
| P264 | Wash skin thoroughly after handling. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection. |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308+P313 | IF exposed or concerned: Call a POISON CENTER or doctor/physician. |
| P321 | Specific treatment (see supplemental first aid instructions on this label). |
| P331 | Do NOT induce vomiting. |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P362 | Take off contaminated clothing and wash before reuse. |
| P370+P378 | In case of fire: Use dry sand, dry chemical or alcohol resistant foam for extinction. |
| P391 | Collect spillage. |
| P403+P233 | Store in a well ventilated place. Keep container tightly closed. |
| P403+P235 | Store in a well ventilated place. Keep cool. |
| 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 (%) |
|---|------------|-------------------|
| Toluene | 108-88-3 | 18-22% |
| Poly(2-(2-ethoxyethoxy) ethyl acrylate) | 27015-29-8 | 78-82% |

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. 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 swallowed

Do NOT induce vomiting. 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. 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 container 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 contact with skin and eyes. Avoid inhalation of vapor or mist. Use explosion proof equipment. Keep away from sources of ignition-No smoking. Take measure to prevent the buildup of electrostatic charge. 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.

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Exposure Guidelines

| Component | CAS No. | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------|----------|------------|---|--|
| Toluene | 108-88-3 | TWA: 20ppm | (Vacated)TWA: 100 ppm (Vacated)TWA: 375mg/m ³ Ceiling: 300ppm (Vacated)STEL: 150ppm (Vacated)STEL: 560mg/m ³ TWA: 200ppm | IDLH: 500ppm TWA: 100ppm TWA: 375mg/m ³ STEL: 150ppm STEL: 560mg/m ³ |

| Component | Quebec | Mexico OEL (TWA) | Ontario TWAEV |
|-----------|---|---|---------------|
| Toluene | TWA: 50ppm TWA: 188mg/m ³ Skin | TWA: 50ppm TWA: 188mg/m ³ | TWA: 20ppm |

Legend:

ACGIH- American Conference of Governmental Industrial Hygienists

OSHA- Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

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. 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 | Sweet, pungent, Benzene like |
| 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 | 110 – 111°C (230 – 232° F) |
| g) | Flash point | 4.44°C/ 40.0° F |
| h) | Evaporation rate | No data available |
| i) | Flammability (solid, gas) | No data available |
| j) | Flammability or explosive limits | |
| | Upper | 7.1% |
| | Lower | 1.1% |
| k) | Vapor pressure | No data available |
| l) | Vapor density | No data available |
| m) | Relative density | No data available |
| n) | Water solubility | No data available |
| o) | Partition coefficient: n- octanol/water | No data available |
| p) | Auto-ignition temperature | 535.0° C (995.0° F) |

- | | | |
|----|---------------------------|-------------------|
| 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

Vapors may form an explosive mixture with air

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

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

Section 11: Toxicological Information

Acute toxicity

Product information

No acute toxicity information is available for this product

Oral LD50

Based on ATE data, the classification criteria are not met. ATE>2000mg/kg

Dermal LD50

Based on ATE data, the classification criteria are not met. ATE>2000mg/kg

Vapor LC50

Based on ATE data, the classification criteria are not met. ATE>2000mg/kg

Component information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------|------------------|---------------------|--------------------|
| Toluene | >5000mg/kg (Rat) | 12000mg/kg (Rabbit) | 26700ppm (Rat) 1 h |

Toxicologically synergistic Products

No data available

Delayed and immediate effects as well as chronic effects from short and long term exposure

Irritation

No data available

Sensitization

No data available

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | CAS No. | IARC | NTP | ACGIH | OSHA | Mexico |
|---|------------|------------|------------|------------|------------|------------|
| Toluene | 108-88-3 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Poly(2-(2-ethoxyethoxy) ethyl acrylate) | 27015-29-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

Mutagenic effects

No data available

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|---|---|
| Reproductive effects | No data available |
| Developmental effects | No data available |
| Teratogenicity | No data available |
| STOT- single exposure | Central Nervous System (CNS) |
| STOT- repeated exposure | None known |
| Aspiration hazard | No data available |
| Symptoms/effects, both acute and Delayed | Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting |
| Endocrine disruptor information | No data available |
| Other adverse effects | The toxicological properties have not been fully investigated |

Section 12: Ecological Information

Ecotoxicity

Do not empty into drains

| Component | Freshwater Algae | Freshwater Fish | Microtox | Water Flea |
|-----------|---|---|------------------------|--|
| Toluene | 12.5mg/L EC50 = 72h 433 Mg/L EC50 > 96 h | 50-70mg/L LC50 96 h 5-7mg/L LC50 96 h 15-19mg/L LC50 96 h 28mg/L LC50 96 h 12mg/L LC50 96 h | EC50 = 19.7mg/L 30 min | 11.5mg/L EC50 = 48 h 5.46 - 9.83mg/L EC50 48 h |

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

| Component | log Pow |
|-----------|---------|
| Toluene | 2.65 |

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)

UN number: 1294 Class: 3 Packing group: II
 Proper shipping name: Toluene, solution
 Reportable quantity (RQ): 167 lbs
 Poison Inhalation Hazard: No

IMDG

UN number: 1294 Class: 3
 Proper shipping name: TOLUENE, SOLUTION

Packing group: II

EMS-No: F-E, S-D

IATA

UN number: 1294 Class: 3
 Proper shipping name: Toluene, solution

Packing group: II

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| Section 15: Regulatory Information |
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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:

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|---------|---------------------|
| Toluene | CAS No. 108-88-3 |
|---------|---------------------|

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right to Know Components

| | |
|---------|---------------------|
| Toluene | CAS No. 108-88-3 |
|---------|---------------------|

Pennsylvania Right to Know Components

| | |
|---|---------------------|
| Toluene | CAS No. 108-88-3 |
| Poly(2-(2-ethoxyethoxy) ethyl acrylate) | 27015-29-8 |

New Jersey Right to Know Components

| | |
|---|---------------------|
| Toluene | CAS No. 108-88-3 |
| Poly(2-(2-ethoxyethoxy) ethyl acrylate) | 27015-29-8 |

California Prop. 65 Components

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

| | |
|---------|---------------------|
| Toluene | CAS No. 108-88-3 |
|---------|---------------------|

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| Section 16: Other Information |
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HMIS Rating

| | |
|---------------|---|
| Health: | 2 |
| Flammability: | 3 |
| Reactivity: | 0 |

NFPA Rating

| | |
|---------------|---|
| Health: | 2 |
| Flammability: | 3 |
| Reactivity: | 0 |

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