



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

**Product Name:** Poly(tetrahydrofurfuryl acrylate), solution in toluene  
**Catalog Number(s):** 886 **Molecular Formula:** (C<sub>8</sub>H<sub>12</sub>O<sub>3</sub>)<sub>x</sub>  
**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	80 - 85%
Poly(tetrahydrofurfuryl acrylate)	29324-52-5	15 - 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. 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 <sup>3</sup> Ceiling: 300ppm (Vacated)STEL: 150ppm (Vacated)STEL: 560mg/m <sup>3</sup> TWA: 200ppm	IDLH: 500ppm TWA: 100ppm TWA: 375mg/m <sup>3</sup> STEL: 150ppm STEL: 560mg/m <sup>3</sup>

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Toluene	TWA: 50ppm TWA: 188mg/m <sup>3</sup> Skin	TWA: 50ppm TWA: 188mg/m <sup>3</sup>	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° C/ 39.2° F
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Flammability or explosive limits	
	Upper	6.70%
	Lower	1.40%
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(tetrahydrofurfuryl acrylate)	29324-52-5	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic effects**

No data available

<b>Reproductive effects</b>	No data available
<b>Developmental effects</b>	No data available
<b>Teratogenicity</b>	No data available
<b>STOT- single exposure</b>	Central Nervous System (CNS)
<b>STOT- repeated exposure</b>	None known
<b>Aspiration hazard</b>	No data available
<b>Symptoms/effects, both acute and Delayed</b>	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
<b>Endocrine disruptor information</b>	No data available
<b>Other adverse effects</b>	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: 1866                      Class: 3                      Packing group: II  
 Proper shipping name: Resin solution  
 Reportable quantity (RQ): 1452 lbs  
 Marine pollutant: No  
 Poison Inhalation Hazard: No

**IMDG**

UN number: 1866                      Class: 3                      Packing group: II

Proper shipping name: Resin solution

Marine pollutant: No

**IATA**

UN number: 1866                      Class: 3                      Packing group: II

Proper shipping name: Resin solution

**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:

	CAS No.
Toluene	108-88-3

**SARA 311/312 Hazards**

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

**Massachusetts Right to Know Components**

	CAS No.
Toluene	108-88-3

**Pennsylvania Right to Know Components**

	CAS No.
Toluene	108-88-3
Poly(tetrahydrofurfuryl acrylate)	29324-52-5

**New Jersey Right to Know Components**

	CAS No.
Toluene	108-88-3
Poly(tetrahydrofurfuryl acrylate)	29324-52-5

**California Prop. 65 Components**

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

	CAS No.
Toluene	108-88-3

**Section 16: Other Information****HMIS Rating**

Health:	2
Flammability:	3
Reactivity:	0

**NFPA Rating**

Health:	2
Flammability:	3
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.