SAFETY DATA SHEET

Revision Date: 03/17/20

Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Poly(2-ethylhexyl methacrylate), solution in toluene

Catalog Number(s): 229 **Molecular Formula:** $(C_{12}H_{22}O_2)_x$

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	65 - 70%
Poly(2-ethylhexyl methacrylate)	25719-51-1	30 - 35%

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/m3 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^o C (230 – 232^o F)
g)	Flash point	4^o C/ 39.2^o 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(2-ethylhexyl methacrylate)	28628-64-0	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic effects No data available

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 Packing group: II EMS-No: F-E, S-D
Proper shipping name: TOLUENE, SOLUTION

IATA
UN number: 1294 Class: 3 Packing group: II
Proper shipping name: Toluene, 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(2-ethylhexyl acrylate)	25719-51-1

New Jersey Right To Know Components

	CAS No.
Toluene	108-88-3
Poly(2-ethylhexyl acrylate)	25719-51-1

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		**NFPA Rating**	
Health:	2	Health:	2
Flammability:	3	Flammability:	3
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.