



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Tris(2-hydroxyethyl)isocyanurate triacrylate
Catalog Number(s): M-205 **Molecular Formula:** C₁₈H₂₁N₃O₉
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)

Serious eye damage, Category 1, H318

Skin sensitization, Category 1, H317

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

Precautionary statement(s)

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear eye protection/ face protection.

P280 Wear protective gloves/protective clothing.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P363 Wash contaminated clothing before reuse.

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 (%)
Tris(2-hydroxyethyl)isocyanurate triacrylate	40220-08-4	100

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 inhaled, remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms occur.

In case of skin contact

In case of skin contact, immediately flush skin with plenty of water while removing contaminated clothing and shoes. Get medical attention.

In case of eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

If swallowed

If swallowed, DO NOT induce vomiting. Get medical attention immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

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

When burned, the following hazardous products of combustion can occur: carbon oxides, hazardous organic compounds, nitrogen oxides, isocyanates, hydrogen cyanide. Polymerization is exothermic and can degenerate into an uncontrolled reaction.

Advice for firefighters

Fire-fighters and others who may be exposed to products of combustion should wear full fire-fighting turn out gear (full Bunker Gear) and self-contained breathing apparatus (pressure demand/NIOSH approved or equivalent).

Further information

Fight fire from a protected location. Cool closed containers exposed to fire with water spray. Closed containers of this material may explode when subjected to heat from surrounding fire. Fire-fighting equipment should be thoroughly decontaminated after use.

Section 6: Accidental Release Measures

Environmental precautions

Prevent further leakage or spillage if you can do so without risk. Ventilate the area. Avoid generation of vapors. Contain and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable containers properly labeled containers for prompt disposal. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits.

Section 7: Handling and Storage

Precautions for safe handling

Do not taste or swallow. Do not get in eyes, on skin, or on clothing. Do not breathe fumes/vapors or mist. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling. Emptied container retains vapor and produce residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

Viscous materials and those supplied as solids at room temperature may require heating to facilitate handling and transfer from their original containers. This product may be heated to a maximum of 60° C/140° F for up to 24 hours. Do NOT use localized heat sources such as band heaters or steam. Use hot boxes or hot rooms for heating or melting. Ensure air space (oxygen) is present during product heating/melting. Do not overheat- this may compromise product quality and/or result in an uncontrolled hazardous polymerization. This product should be consumed in its entirety after heating/melting. Avoid re-heating multiple times; this may cause product degradation. If this product freezes, heat it as specified above and mix gently to redistribute the inhibitor.

Conditions for safe storage, including any incompatibilities

Keep in a dry, cool place. Store in closed containers, in a secure area to prevent container damage and subsequent spillage. Store out of direct sunlight in a cool well-ventilated place. Keep stabilizer levels constant to avoid explosive polymerization. An air space is required above the liquid in all containers; avoid storage under an oxygen-free atmosphere.

Inhibitor levels should be maintained.

Store separate from: strong oxidizing/reducing agents, free radical generators, inert gas, oxygen scavenger, peroxides

Temperature Tolerance – Do not store below: 0° C (32° F)

Temperature Tolerance – Do not store above: 38° C (100° F)

Specific end use(s)

Laboratory chemicals, Synthesis of substances

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Airborne Exposure Guidelines:

US. OARS. WEELs Workplace Environmental Exposure Level Guide:

Skin designation

Remarks:

Can be absorbed through the skin

Time Weighted Average

1 mg/m³

Remarks:

Avoid skin or eye contact with liquids or aerosols

Remarks:

Listed

Only those components with exposure limits are printed in this section. Limits with skin contact designation above have skin contact effect. Air sampling alone is insufficient to accurately quantitate exposure. Measures to prevent significant cutaneous absorption.

Appropriate engineering controls

Investigate engineering techniques to reduce exposure below airborne exposure limits or to otherwise reduce exposures. Provide ventilation if necessary to minimize exposures or to control exposure levels to below airborne exposure limits (if applicable see above). If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

Personal protective equipment

Eye/face protection

Where there is potential for eye contact, wear chemical goggles and have eye flushing equipment immediately available. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Wear appropriate chemical resistant protective clothing and chemical resistant gloves to prevent skin contact. Consult glove manufacturer to determine appropriate type glove material for give application. Avoid natural rubber gloves. Rinse immediately if skin is contaminated. Wash contaminated clothing and clean protective equipment before reuse. Wash thoroughly after handling.

Respiratory protection

Avoid breathing vapor or mist. Where airborne exposure is likely or airborne exposure limits are exceeded (if applicable, see above), use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. Consult respirator manufacturer to determine appropriate type equipment for a give application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR 1910.134.

Control of environmental exposure

Prevent further leakage or 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 @ <30°C
b)	Odor	Acrylic-like
c)	Odor Threshold	No data available
d)	pH	~7
e)	Melting point/freezing point	Approx. 50° C (122° F)
f)	Initial boiling point and boiling range	No data available
g)	Flash point	182° C (360° F)- Closed cup
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	Negligible
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

Hazardous polymerization may occur. Polymerization is exothermic and degenerates into an uncontrolled reaction.

Chemical stability

This material is chemically stable under normal and anticipated storage, handling and processing conditions. However, this material can undergo hazardous polymerization.

Conditions to avoid

This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat. Avoid direct sunlight. Do NOT expose to ultraviolet light.

Incompatible materials

Strong oxidizing/reducing agents, free radical generators, inert gas, oxygen scavengers, peroxides

Hazardous decomposition products

Thermal decomposition giving flammable and toxic products: carbon oxides, acrylates, nitrogen oxides, isocyanates, hydrogen cyanide, hazardous organic compounds.

In the event of fire: see section 5

Section 11: Toxicological Information

Acute Toxicity:

Oral: Harmful if swallowed (Rat) LD0 >2,000 mg/kg

Skin Irritation: Not irritating (Rabbit) Irritation Index: 0,0/8,0. (4 h)

Eye Irritation: Causes serious eye damage (Rabbit)

Skin sensitization: May cause sensitization by skin contact. (data for a similar material)

Other Information

Possible cross sensitization with other acrylates and methacrylates

Section 12: Ecological Information

Ecotoxicology:

Aquatic Toxicity Data: Toxic. LD50 = 6.9 mg/l

Aquatic Invertebrates: Practically non-toxic. Invertebrates EC50 = 120 mg/l

Algae: Harmful, EC50 = 12 mg/l

Section 13: Disposal Considerations

Waste treatment methods

Product

Offer surplus and non-recyclable solutions 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

Reactivity hazard, acute health hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Tris(2-hydroxyethyl)isocyanurate triacrylate	CAS-No. 40220-08-4
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New Jersey Right To Know Components

No components are subject to the New Jersey Right to Know Act.

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

Health:	2
Flammability:	0
Reactivity:	0

NFPA Rating

Health:	2
Flammability:	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.