



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Tetraethylene glycol diacrylate **Molecular Formula:** C₁₄H₂₂O₇
Catalog Number: M-189
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)

Acute toxicity, Oral, Category 4, H302
Skin irritation, Category 2, H315
Serious eye damage, Category 1, H318
Specific target organ toxicity- single exposure, Category 3, Respiratory system, H335

GHS Label elements, including precautionary statements

Pictogram



Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Precautionary statement(s)

P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P330 Rinse mouth.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – This product may release fume and/or vapor of variable composition depending on processing time and temperature. Possible cross sensitization with other acrylates and methacrylates

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 (%)
Tetraethylene glycol diacrylate	17831-71-9	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 breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

In case of contact, immediately flush skin with plenty of water. Get medical attention. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and consult a physician.

If swallowed

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

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, Polymerization is exothermic and can degenerate into an uncontrolled reaction.

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Fight fire from a protected location. Use water spray to cool unopened containers. 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

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Prevent further leakage or spillage if you can do so without risk. 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 and collect spillage with non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place into suitable 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.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin, clothing and eyes. Do not taste or swallow. Avoid inhalation of vapor or mist. Use only with adequate ventilation. Wash thoroughly after handling. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry, cool place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store out of direct sunlight in a cool well ventilated place. Keep stabilizers 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- the typical shelf-life for this product is 6 months.

Store separate from: Strong oxidizing agents, Strong reducing agents, Free radical generators, Inert gas, Oxygen scavenger, peroxides

Temperature tolerance- Do not store below: 32° F (0° C)

Temperature tolerance- Do not store above: 100° F (38° C)

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values. Hazardous components without workplace parameters.

Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Investigate engineering techniques to reduce exposures. Provide ventilation if necessary to minimize exposures. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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

Avoid breathing processing vapor or mist. 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	Musty
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	No data available
g)	Flash point	>94° C (201° F) (Pensky-Martens closed cup)
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	1.114 (25° C (77° F))
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

No data available

Chemical stability

Stable under recommended storage conditions. However, this material can undergo hazardous polymerization.

Possibility of hazardous reactions

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

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 agents, Strong reducing agents, Free radical generators, Inert gas, Oxygen scavenger, Peroxides

Hazardous decomposition products

Thermal decomposition giving flammable and toxic products: Carbon oxides, Acrylates, Hazardous organic compounds

In the event of fire: see section 5

Section 11: Toxicological Information

Information on toxicological effects

Acute toxicity

Oral

Harmful if swallowed. Rat-LD50-800 mg/kg (Undiluted material is corrosive to the digestive tract)

Dermal

May be harmful in contact with skin. Rabbit-LD50 > 3,000 mg/kg

Inhalation

No deaths occurred. Rat-LC0 = 1.24 mg/l (Vapor)
(OECD Test Guideline 403)

Skin corrosion/irritation

Causes skin irritation (Rabbit) 4.4/8.0

Serious eye damage/eye irritation

Causes serious eye damage. (Rabbit) Irritation Index: 103/110

Respiratory or skin sensitization

Not a sensitizer. Guinea pig Maximization Test. (Guinea pig) No skin allergy was observed

Genotoxicity

No genetic changes were observed in laboratory test using: Bacteria, yeast

Genetic changes were observed in a laboratory test using: Animal cells

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

May cause respiratory irritation

Specific target organ toxicity - repeated exposure

Chronic dermal administration to Mouse/ signs: Ulceration

Subchronic dermal administration to Rabbit/ signs: Severe irritation

Aspiration hazard

No data available

Additional Information

No data available

Section 12: Ecological Information

Toxicity

Toxicity to fish	Toxic. Leuciscus idus (Golden orfe) 96 h LC50 4.6 – 10 mg/l
Toxicity to daphnia and other aquatic Invertebrates	Toxic. Daphnia magna (Water flea) 48 h EC50 2.6 mg/l
Toxicity to algae	Toxic. Desmodesmus subspicatus (Green algae) 72 h EC50 (Growth inhibition) 1.5 mg/l

Persistence and degradability

Biodegradability Readily biodegradable. (28 d) Biodegradation 60-70%

Bioaccumulative potential

Slightly bioaccumulable

Octanol Water Partition Coefficient: log Pow 2.81 (OECD Test Guideline 107)

Mobility in soil

Log Koc~ 2 calculated

Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life.

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)

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

Tetraethylene glycol diacrylate	CAS No. 17831-71-9
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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

Warning! This product contains a chemical known to the State of California to cause cancer.

Benzene, methyl-	CAS No. 108-88-3
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Section 16: Other Information

HMIS Rating

Health:	2
Flammability:	1
Reactivity:	2

NFPA Rating

Health:	2
Flammability:	1
Reactivity:	2

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.