

Safety data sheet for chemical products, MSDS

Product name: Two-trihydroxymethylpropane tetraacrylic acid-TF

According to GB/T 16483、GB/T 17519

Initial date of preparation: 2022/11/12

The revision date: 2026/1/1

Section 1 - Chemical and corporate identity

Product's information

Chemical name: Two-trihydroxymethylpropane tetraacrylic acid-TF

Supplier's information

Supplier: Guangzhou BAWO New Material Science Co., Ltd.

Tel: 86-020-31074363

Fax: 86-020-31074309

Emergency Contact Number: 86-020-31074363

Section 2 - Hazard Identification

GHS of the substance or mixture

Skin irritation	Category 2
Skin sensitization	Category 1
Eye irritation	Category 2A
Acute toxicity, oral	Category 4

GHS label elements, hazard statements and precautionary statement



Label elements:

Signal word: Warning

Hazard statement:

H302	Harmful if swallowed;
H315	Causes skin irritation;
H317	Causes skin sensitization;
H319	Causes serious eye irritation.

Hazardous Ingredient Information: Acrylic Acid

Precautionary statement:



Prevention:

Do not breathe dust/fume/gas/mist/vapours/spray

Wash thoroughly after handling

Do not eat, drink or smoke in areas where this material is used

Use only outdoors or in a well-ventilated area

Avoid release to the environment

Wear protective gloves/protective clothing/eye protection/face protection

Response:

Inhalation: Move the person to fresh air and keep at rest in a position comfortable for breathing. If feeling unwell, seek medical attention. If experiencing respiratory symptoms, seek medical advice/attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Seek immediate medical advice/attention.

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical advice/attention.

Skin Contact: Wash skin thoroughly with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. If skin irritation occurs, get medical advice/attention.

Hair Contact: Wash with plenty of soap and water.

General Advice: If exposed or concerned, or if you feel unwell, seek medical advice/attention. Take off contaminated clothing and wash it before reuse. If clothing is heavily contaminated, remove and discard immediately.

Storage: Keep container tightly closed. Store in a cool, well-ventilated place, out of direct sunlight and away from heat sources. Keep container locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

Treatment: Handle containers and contents in compliance with applicable local, state/provincial, and federal laws.

Physical and chemical hazard: Stable under normal handling conditions.

Health hazards: May cause skin sensitization upon contact.

Environmental hazards: Based on available data, no ecotoxic properties are known.

Other hazards: No information

Section 3 - Composition/Composition Information

Chemical characterization: mixture

SubstanceName	Content	CASNo.
Di(trimethylolpropane) tetraacrylate	> 99	94108-97-1
Acrylic Acid	< 1	79-10-7



Section 4 - First-aid Measures

General emergency procedures:

In the state of an accident or when you feel uncomfortable, seek medical treatment immediately (show safety warning labels and MSDS as much as possible). The exposure (skin contact, eye contact, inhalation or intake) of this product may have a delayed effect.

Skin contact: Take off the contaminated clothes and shoes immediately and rinse the skin with a lot of soapy water. If you feel the irritation or the irritation continues, you should seek medical treatment.

Eye contact: Raise the upper and lower eyelids and rinse the eyes with a large amount of water for at least 15 minutes immediately after contact. If you feel unwell, seek medical treatment. Do not rub eyes, it may cause eyeball injuries. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Inhalation: If fumes, aerosols or combustion products are inhaled remove from contaminated area. Other measures are usually unnecessary.

Eating by mistake: After eating by mistake, if the patient is conscious, rinse the patient's mouth with water; in case of spontaneous vomiting, tilt the patient's body to prevent vomit entering the trachea. Do not induce vomiting to unconscious patients. If you have an accident or feel sick, seek medical treatment immediately.

Emergency rescuer protection:

Rescuers should wear appropriate protective equipment (refer to details of the precautions for exposure prevention measures)

Medical precautions: Treatment according to symptoms. Depending on the patient's situation and the specific situation of the accident, the treatment method may be different. In all cases of potential toxication, onsite emergency treatment is crucial. When seeking medical treatment, show the labels on the container and MSDS.

Refer to Section 11 Toxic Substance Information

Section 5 - Fire-fighting Measures

Fire extinguishing media:

Suitable extinguishing media: Use extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: No data

Specific Hazards:

1. Pressure can build up and containers may burst in a fire or when exposed to heat.
2. Hazardous to aquatic life, with long-lasting effects. Firefighting water contaminated with this substance must be contained and prevented from entering any waterways, drains, or sewers.



Hazardous Combustion Products: Burning can generate carbon monoxide, carbon dioxide, and irritating or toxic vapors and gases.

Advice for firefighters:

Special Protective Equipment for Firefighters:

In case of fire, evacuate all personnel from the affected area and its surroundings. Leave the scene immediately. Do not take any action if there is any personal danger or if you have not received appropriate training.

Protection for firefighters: Firefighters must wear full protective gear, including positive-pressure self-contained breathing apparatus (SCBA).

Note: This substance may support combustion if ignited.

Section 6 - Leakage Emergency Treatment**Personal protective measures, protective equipment and emergency procedures:**

Do not take action if there is any personal danger or if you are not properly trained.

Evacuate the surrounding area.

Keep unnecessary or unprotected personnel away.

Do not touch or walk through the spilled material. Avoid inhalation of vapors or mists.

Ensure adequate ventilation. Wear respiratory protection if ventilation is insufficient.

Use personal protective equipment.

Environmental Attentions:

Keep spills away from soil, drains, sewers, and water sources.

If the product causes environmental pollution (watercourse, soil or air), the relevant authorities shall be notified. Water pollutants.

Water pollution substances may be harmful to the environment if released in large quantities.

Methods and appliances for cleaning up:**Small Spill:**

Stop the leak only if it can be done without risk. Move containers away from the spill area.

If water-soluble: Dilute with water and mop up.

If water-insoluble: Absorb with inert, dry material (e.g., sand, vermiculite) and place in an approved waste container.

Dispose of through a qualified contractor in accordance with local regulations.

Large Spill:

Stop the leak only if it can be done without risk. Move containers away from the spill area.



Keep the spill upwind. Prevent entry into sewers, basements, or confined spaces.

Flush spillage to a treatment plant or handle as follows:

Control and collect the spill using non-flammable absorbent material (e.g., sand, earth, diatomaceous earth).

Place absorbed material in a suitable container for disposal according to local regulations (see Section 13).

Dispose of through a qualified contractor.

Note: Contaminated absorbent presents the same hazard as the spilled product. \Refer to Section 1 (Emergency Contacts) and Section 13 (Disposal Information) for further instructions.

Section 7 - Safety Operating Precautions and Storage

Safety operation precautions and protective measures:

Wear appropriate personal protective equipment (refer to Section 8).

Persons with a history of skin sensitization should not be employed in handling this product.

Avoid contact with eyes, skin, or clothing.

Do not inhale vapors or mists.

Do not ingest.

Avoid release to the environment.

If this substance presents a respiratory hazard under normal conditions of use, operate only with adequate ventilation or while wearing respiratory protection.

Store in the original container or in a permitted container of compatible material.

Keep tightly closed when not in use.

Containers may contain product residues and can be hazardous.

Do not reuse containers.

Occupational Hygiene Recommendations:

Wear appropriate personal protective equipment (refer to Section 8).

Eating, drinking, and smoking are prohibited in areas where this material is handled, stored, or processed.

Workers should wash their hands and face before eating, drinking, or smoking after finishing work.

Remove contaminated clothing and protective equipment before entering eating areas.

Persons with a history of allergy to this product should not be involved in any handling processes.

Avoid contact with eyes, skin, or clothing.

Do not inhale vapors or mists.

Do not ingest.

Avoid release to the environment.

If the material presents a respiratory hazard during normal use, use only with sufficient ventilation or wear appropriate respirators.



Keep original containers or approved alternative materials tightly closed when not in use.

Empty containers may retain residual product and can be harmful.

Do not reuse containers.

Safe Storage Conditions, Including Any Incompatibilities:

Store at temperatures between -15 and 35°C (5 to 95°F).

Store in accordance with local regulatory requirements.

Store in a dry, cool, well-ventilated place, away from incompatible materials (see Section 10).

Keep locked. / Store under lock and key.

Ensure containers are tightly closed and sealed before use.

Opened containers must be carefully resealed and kept upright to prevent leakage.

Do not store in unlabeled containers.

To avoid leakage causing environmental pollution, select appropriate packaging.

Store in original packaging, away from direct sunlight and avoid exposure to sunlight.

Notes: The product contains inhibitors to stabilize it against accidental polymerization. Polymerization is exothermic and may lead to gas accumulation causing container rupture.

Section 8 - Contact Control/Personal Protection

Control parameters

Occupational Exposure Limits (OEL): None

Appropriate engineering controls:

If user operations generate dust, mist, gas, vapor, or fumes, use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental Exposure Controls:

Exhaust ventilation or work process equipment should be checked to ensure compliance with environmental regulations. In certain cases, fume scrubbers, filters, or engineering modifications to process equipment will be required. Wash hands thoroughly after work and at the end of the shift.

Personal Protective Equipment

Hygiene Measures: Before handling chemical products, thoroughly wash hands, forearms, and face before eating, drinking, smoking, or at the end of all work shifts. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed to leave the workplace. Launder contaminated clothing before reuse. Ensure eyewash stations and safety showers are located near the workstation.

Eye/Face Protection: Safety goggles with side shields.



Hand Protection: When handling chemicals, if a risk assessment indicates it is necessary, always comply with recognized standards for chemical-resistant, impermeable gloves. Breakthrough time: 4 - 8 hours; Nitrile rubber (0.5 mm).

Skin Protection: Wear chemical-resistant protective clothing.

Respiratory protection: If risk assessment indicates it is necessary, use a standard-compliant air-purifying or air-supplied respirator. The selection of the respirator must be based on the known or anticipated exposure level, the hazards of the product, and the safe operating range of the selected respirator.

Instructions: Do not use natural rubber gloves. Replace damaged gloves.

Section 9 - The characteristics of physical and chemical

Appearance and characteristics:	Clear transparent or slightly yellow liquid
Odor:	Characteristic odor
Melting/Freezing Point:	No data
Relative Density:	1.05 ~ 1.15 (Specific gravity at 25 °C)
Melting/Melting Range:	No data
Boiling Point/Boiling Range:	No data
Flash Point:	> 150°C (closed cup)
Vapor Pressure (at 25°C):	No data
Surface Tension (mN/m) :	No data
Autoignition Temperature (°C):	No data
n-Octanol/Water Partition Coefficient:	No data
pH Value:	No data
Solubility:	Insoluble in water; soluble in organic solvents
Viscosity:	500 - 5,000 cps (at 25°C)
Explosion Limit (%):	Upper limit -- / Lower limit --

Section 10 - Stability and Reactivity

Reactivity: No specific test data available; relevant to the activity of this product or its components.

Chemical stability: The product is stable under recommended storage and handling conditions (see Section 7).

Possibility of dangerous reactions: Under normal storage and use conditions, hazardous reactions will not occur.

Conditions to avoid contact: Keep away from heat, sparks, and flames. Polymerizable by light. Spontaneous polymerization may occur during heating.



Incompatible materials: Strong oxidizing agents, peroxide radical initiators, metals that react with strong bases.

Hazardous decomposition products: Under normal storage and use conditions, hazardous decomposition products should not be produced.

Section 11 - Toxicological information:

Respiratory or Skin Sensitization: No data.

Germ Cell Mutagenicity: No data.

Carcinogenicity: No data.

Reproductive Toxicity: No data.

Specific Target Organ Systemic Toxicity — Single Exposure: No data.

Specific Target Organ Systemic Toxicity — Repeated Exposure: No data.

Inhalation Hazard: No data.

Toxicokinetics, Metabolism, and Distribution: No data.

Others: No data.

Section 12 - Ecological information

Ecotoxicity: No data.

Biodegradability: No data.

Bioaccumulation: No data.

Mobility in Soil: No data.

Other Adverse Effects: No data.

Section 13 - Disposal considerations

Disposal method:

Waste generation should be avoided or minimized as much as possible.

The disposal of this product, solutions, and any by-products must always comply with environmental protection and waste disposal regulations, as well as the requirements of any regional local authorities.

Dispose of surplus and non-recyclable products through a licensed waste disposal contractor. Unless fully compliant with the requirements of all competent authorities, waste should not be disposed of in sewers.

Waste packaging should be recycled. Incineration or landfilling is only considered feasible if recycling is not an option.



This substance and its container must be disposed of in a safe manner. Care should be taken to handle empty, unwashed, or unrinsed containers. Empty containers or liners may retain some product residue. Avoid spreading materials and runoff into soil, waterways, drains, and sewers.

Section 14 - Transportation information

UN number: --

United Nations transportation name: --

Hazardous classification: Non-hazardous chemical goods

Dangerous goods number: --

Environmental hazards: Not listed by UN/IMDG/IATA

Note for users:

The container during transportation is upright and safe.

Ensure that the person who transports the product knows what to do in the event of an accident or spill.

Avoid exposure to rain and sun.

Section 15 - Regulatory information

Specific safety, health and environmental regulations for this product:

Certain countries or regions may regulate this product (including its components).

IECSC: No.32146

List of Prohibited Import Items: No components are listed on this list.

List of Prohibited Export Items: No components are listed on this list.

List of Severely Restricted Toxic Chemicals for Import/Export of China (MEP Order No. 27): No components are listed on this list.

International Control Treaty

List of chemicals of schedules I, II and III: No list

Monterey Convention (Annex A, B, C.): No list

The Stockholm Convention on persistent organic pollutants: No list

Prior informed consent procedure (PIC) of the Rotterdam Convention: No list

Aarhus Agreement (UNECE Aarhus Protocol) on persistent organic pollutants and heavy metals: No list

Section 16 - Other information

Write and edit information:

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Important disclaimer:

The data of the company is currently known data, according to the product under normal use, list must pay attention to matters, suggest the user to enable before, should read this data, help to the safe use and correct waste management. Please contact business technical staff if you have any doubts. But this data does not ensure that extended to processed products, whether have you made with materials processing, the user should be aimed at its product testing or certification to fully comply with relevant laws and regulations and requirements of the client, especially special purposes, such as the application of medicine, in case of any dispute and should not belong to the company's liability.

Data maker: Guangzhou BAWO New Material Science Co.,Ltd

