

Safety data sheet for chemical products, MSDS

Product name: Cyclic Trimethylolpropane Formal Acrylate (CTFA)

According to GB/T 16483、GB/T 17519, 2022.11.5 V1.0

Part I Chemicals and Enterprise Identification

Section 1 - Chemical and corporate identity

Chemical name: Cyclic Trimethylolpropane Formal Acrylate

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

Tel: 86-020-31074363

Fax: 86-020-31074309

Emergency Contact Number: 86-020-31074363

Part II Hazard Identification

GHS Risk Category: Acute Toxic (Oral) - Category 4

Skin irritation - Category 2

Skin sensitization - Category 1

Eye irritation - Category 2A

Label elements:



Signal word: Warning

Hazard statement: H302 May be harmful if swallowed;

H315 Causes skin irritation;

H317 Causes skin sensitization;

H319 Causes serious eye irritation.

Hazardous component: Acrylic acid

Precautionary statement: Avoid release into the environment

Only be used outdoors or in well-ventilated places.

Do not inhale dust/fume/gas/mist/vapors/spray.

Do not eat, drink and smoke when using this product.

Avoid contact with skin, wear eye protection, protective gloves, protective masks, and protective clothing.

Wash hands thoroughly after handling.



If inhaled by mistake, the victim should be moved to open air and maintain a comfortable posture.

If you are not feeling well, seek medical treatment.

If you have respiratory problems, seek medical treatment.

If you swallow by mistake, rinse your mouth and seek medical treatment.

If it enters eyes, rinse carefully with water for a few minutes and seek medical treatment.

If the skin or hair is contaminated, wash it with a lot of soap and water.

If skin irritation occurs, seek medical treatment.

If the clothes are contaminated, take them off and discard them immediately.

If you are irritated and have any concerns, seek medical treatment.

If you feel unwell, seek medical treatment.

Storage: Keep the container airtight and protect it from the sun.

Store in a well-ventilated place away from the heat source, and the storage place must be locked.

Discard: Discard contents and containers to an appropriate treatment should be in accordance with relevant regulations.

Disposal: Dispose of containers and contents shall be implemented in accordance with local laws and regulations.

Physical and chemical hazards: Stable

Health hazards: Skin contact sensitization

Environmental hazards: According to the available information of the product, the toxic properties are unclear.

Other hazards which do not require classification: Unknown

Part III Composition/Composition Information

Chemical characterization: mixture

Substance Name	Content	CAS No.
Cyclic Trimethylolpropane Formal Acrylate	> 99	66492-51-1
Acrylic acid	< 1	79-10-7

Part IV 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.

Inhalation: Breathe fresh air and keep warm and quiet. In case of spontaneous vomiting, tilt the body to prevent vomit entering the trachea. Rinse the mouth with water.

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 Part XI Toxic Substance Information

Part V Fire-fighting Measures

Fire extinguishing media:

Suitable extinguishing media: Use a fire extinguishing media that can extinguish the surrounding flames.

Unsuitable extinguishing media: No data

Specific hazards: In the case of combustion or heating, the pressure will increase and the container will burst. This substance is harmful to aquatic life with long lasting effects. Fire fighting water contaminated by this substance must be stored to avoid flowing into any waterways, canals and sewers.

Harmful combustion products: Combustion can produce carbon monoxide, carbon dioxide and irritant or toxic vapors and gases.

Special protective actions for firefighters: In case of fire, evacuate all personnels from the disaster area and nearby places and leave quickly. Do not take action when there is personal danger or without proper training.

Protection of firefighters: Firefighters must wear a full set of protective equipment (SCBA) containing positive pressure selfcontained breathing apparatus.

Attentions: This substance helps to burn if ignited.



Part VI Leakage Emergency Treatment

Personal protective measures, protective equipment and emergency procedures: Do not take action when there is personal danger or without proper training. Evacuate the surrounding area. Do not allow unnecessary or unprotected personnel to enter. Do not touch or walk through the leaked material. Do not inhale steam or smoke. Adequate ventilation equipment is needed. If the ventilation equipment is insufficient, wear respiratory protective equipment. Wear 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:

Minor leakage: Stop leakage when there is no danger. Move the container out of the leaking area. If it is soluble in water, dilute and erase it with water. Water insoluble substances should be adsorbed with inert dry substances and placed in disposal containers. It must be handled by qualified suppliers.

Major leakage: Stop leakage when there is no danger. Move the container out of the leaking area. Blow away the leak from the wind. Prevent enter into sewers, basements or airtight areas.

Rinse the leak to the waste plant or as follows. Use non flammable absorbents, such as sand, soil, and diatomite, to control and collect spills, and put them in containers in accordance with local regulations (see Part XIII). It must be handled by qualified suppliers. Contaminated absorbed materials are as harmful as leaking products.

Note: Please refer to the emergency contact instructions in Part I and the disposal methods in Part XIII.

Part VII Operational Disposal and Storage

Safety operation precautions

Protection measures: Wear appropriate personal protective equipment (refer to Part VIII). People with skin allergy history should not be employed to handle this product. Keep the substance away from your eyes, skin or clothing. Do not inhale steam or smoke. Do not swallow. Avoid discharging into the environment. If this substance is in danger of breathing under normal use, please only operate when in ventilated area or wearing respiratory protective equipment. Store in the original container or in a licensed container of the same material. Please cover tightly when not in use. The container contains product residues, which may be dangerous. Do not reuse the container.

occupational health recommendations:

Wear appropriate personal protective equipment (refer to Part VIII). Eating, drinking and smoking are prohibited in areas where this material is processed and stored. Workers should wash hands and faces before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering the diet area.



People with a history of skin allergies should not be involved in any process of this product. Keep the substance away from your eyes, skin or clothing. Do not inhale steam or fog. Avoid releasing into the environment. If this substance is in danger of breathing under normal use, please only operate when in ventilated area or wearing respiratory protective equipment. Store in the original container or in a licensed container of the same material. Please cover tightly when not in use. The container contains product residues, which may be dangerous. Do not reuse the container.

Safe storage, including any incompatibility: Stored between the following temperatures: -15 to 35°C (5 to 95°F). Store in a dry, cool and well-ventilated place away from incompatible objects (see Part X) according to local regulations. Locked storage. Keep the container tightly closed and sealed before using it. The opened container must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. In order to avoid environmental pollution caused by leakage, the packaging should be appropriate. Store in the original packing container, keep away from direct sunlight.

Instructions: The product inhibitor is stable and avoid accidental polymerization. Polymerization will release heat and may cause gas aggregation to rupture the container.

Part VIII Contact Control/Personal Protection

Control parameters Occupational exposure allowable concentration: None

Appropriate engineering control: If the dust, smoke, gas, steam or fog, are generated during operation, the use of process shell, local exhaust ventilation or other engineering controls to expose workers to air pollutants below any recommended or legal restrictions.

Environmental exposure control: Ventilation inspection or emissions generated by equipment during work should be checked to ensure that they meet the requirements of environmental regulations. In some cases, soot purifiers, filters or engineering modification process equipment will be needed to reduce emissions to an acceptable level.

Personal protective measures

Hygienic measures: Wash hands, forearms and face thoroughly before eating, smoking, toileting and at the end of work. Appropriate technology should be used to dispose potentially contaminated clothes. Contaminated clothes should not be allowed to take out of the workplace. Reuse contaminated clothes after washing and cleaning. Ensure that the eyewash station and safe shower room are close to the workstation.

Eye/Face Protection: Safety glasses should contain side protectors.

Hand Protection: When handling chemicals, if there is a risk assessment that shows necessary, chemical corrosion-resistant and nonpermeable gloves should always be worn. 4-8 hours (breakthrough): nitrile rubber (0.5 mm).



Skin protection: anti-chemical protective clothing

Respiratory protection: If the risk assessment indicates that this is necessary, use a standard air purification or air respirator. The mask must be based on the known or expected exposure level, the hazard of the product and the safety scope of work of the selected respirator.

Description: Do not use natural rubber gloves, replace the damaged gloves.

Part IX The characteristics of physical and chemical

Appearance and characteristics: Clarify transparent or slightly yellow liquid

Odor: special odor

Melting point/ freezing point (°C): No information

Relative density: 1.08~1.11 (25°C specific gravity)

Melting point/melting range: No information

Boiling point/boiling range: >150 °C(closed cup)

Flash point: No information

Vapor pressure (25 ° C): No information

Surface tension (mN/m): No information

Spontaneous combustion temperature (° C): No information

N-octanol/water distribution coefficient: No information

PH Value: No information

Solubility: Insoluble in water, soluble organic matter

Viscosity (25 ° C): 12-18 cps

Explosion Limit (%): Upper limit -- lower limit --

Part X Stability and Reactivity

Reactivity: There is no specific test data, which can be used for the product or its component activity.

Chemical stability: The product is stable under the recommended storage and treatment conditions (see Part VII).

Possibility of dangerous reactions: Under normal storage and use conditions, there will be no dangerous reaction.

Conditions to avoid contact: Stay away from heat sources, sparks, flames and aggregate light. During the heating process, spontaneous polymerization can occur.

Incompatible materials: Peroxide free radical initiators of strongly oxidizing substances, strong alkali-reactive metals.



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

Part XI Toxicological Data

Respiratory or skin allergies: No data

Mutation of germ cells: No data

Carcinogenicity: No data

Reproductive toxicity: No data

Special target organ systemic toxicity: One-time contact: No data

Special target organ systemic toxicity: Repeated contact: No data

Inhalation hazard: No data

Toxico dynamics, metabolism and distribution: No data

Others: No data

Part XII Ecological Data

Ecological toxicity: No data

Biodegradability: No data

Bioaccumulatory: No data

Migration in soil: No data

Other negative effects: No data

Part XIII Disposal of Waste

Disposal method: The generation of waste should be avoided or minimized as much as possible. The treatment of products, solutions and any by-products shall always meet the requirements of environmental protection and waste disposal regulations and the requirements of any regional local authorities. Handle the remaining and non-recyclable products through a licensed waste disposal supplier. Waste should not be disposed of in the sewers unless the requirements of all competent authorities are fully met. Waste packaging should be recycled. Burning or landfill is not allowed. The substance and its containers must be disposed of in a safe manner. When clearing up, the container without cleaning and rinsing should be handled. Empty containers or liners can retain some product residues. Avoid the materials enter into soil, waterways, drainage pipes and sewers.

Part XIV 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.

Part XV Regulatory Information

Specific safety, health and environmental regulations for this product:

Some countries or regions may restrict this product (including its ingredients).

Inventory of Existing Chemical Substances in China (IECSC): No.3547

List of prohibited items for import: No ingredients are included in the list.

List of prohibited items for export: No ingredients are included in the list.

The list of toxic chemicals strictly restricted from the import and export of China:

No ingredients are included in the list.

International control treaties

Chemicals in Schedules I, II and III of the Chemical Weapons Convention List

	Highway transportation (ADR/RID)	Maritime transport (IMDG)	Air transport (ICAO/IATA)
UN number	None	None	None
United nations transport name	None	None	None
United nations classification of hazards	None	None	None
Categories of packing	None	None	None
Marine pollutant	NO	NO	NO

Instruction:

1、The transport vehicles should be equipped with the corresponding number of fire fighting equipment and emergency leakage equipment.





- 2、 It is forbidden to use mechanical equipment and tools that are easy to spark.
- 3、 It is forbidden to mix with oxidizer, acid, strong alkali and edible chemicals.
- 4、 The packing should be complete during shipment, and the loading should be safe.
- 5、 Product should prevent exposure to the sun, rain, and high temperature during transportation. The best time to transport is the morning and evening.
- 6、 During the stopover, it should stay away from the fire, heat source and high temperature area.

Part XVI - Other information

Write and edit information:

The safety technical specifications have been revised in 16 content formats with reference to GB/T 17519-2013 / chemical safety technical specifications.

The issue date: 2023/10/09

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

