



# SAFETY DATA SHEET

## 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

**Product name:** 2,2,2-Trifluoroethyl Butyrate  
**Product code:** B2144  
**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
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**Revision number:** 1

## 2. HAZARDS IDENTIFICATION

### Classification of the GHS

#### PHYSICAL HAZARDS

Flammable liquids Category 3

#### HEALTH HAZARDS

Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2A

#### ENVIRONMENTAL HAZARDS

Not classified

### GHS label elements

#### Pictograms or hazard symbols



#### Signal word

Warning

#### Hazard statement

Flammable liquid and vapour

Causes skin irritation

Causes serious eye irritation

#### Precautionary statements

##### [Prevention]

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Keep container tightly closed.

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against ignition by the static discharge and the spark.

Wash hands thoroughly after handling.

Wear protective gloves/eye protection/face protection.

##### [Response]

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

If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

Take off contaminated clothing and wash before reuse.

##### [Storage]

Store in a well-ventilated place. Keep cool.

##### [Disposal]

Dispose of contents/container through a waste management company authorized by the local government

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

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<b>Component(s):</b>	2,2,2-Trifluoroethyl Butyrate
<b>Percent:</b>	>98.0%(GC)
<b>CAS Number:</b>	371-27-7
<b>Synonyms:</b>	Butyric Acid 2,2,2-Trifluoroethyl Ester
<b>Chemical Formula:</b>	C <sub>6</sub> H <sub>9</sub> F <sub>3</sub> O <sub>2</sub>

### 4. FIRST AID MEASURES

<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
<b>Skin contact:</b>	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion:</b>	Get medical advice/attention if you feel unwell. Rinse mouth.
<b>Protection of first-aiders:</b>	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

### 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Dry chemical, foam, water spray, carbon dioxide.
<b>Extinguishing media not to be used:</b>	Solid streams of water
<b>Specific hazards:</b>	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
<b>Specific methods:</b>	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if safe to do so.
<b>Special protective equipment for firefighters:</b>	When extinguishing fire, be sure to wear personal protective equipment.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
<b>Environmental precautions:</b>	Prevent product from entering drains.
<b>Methods and materials for containment and cleaning up:</b>	Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
<b>Prevention of secondary hazards:</b>	Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.

### 7. HANDLING AND STORAGE

#### Handling

<b>Technical measures:</b>	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapor or mist. Keep away from heat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapor or aerosol will be generated.
<b>Advice on safe handling:</b>	Avoid contact with skin, eyes and clothing.

#### Storage

<b>Storage conditions:</b>	Keep container tightly closed. Store in a cool, dark and well-ventilated place.
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## 7. HANDLING AND STORAGE

**Packaging material:** Store away from incompatible materials such as oxidizing agents.  
Law is followed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.

### Personal protective equipment

**Respiratory protection:** Vapor respirator. Follow local and national regulations.  
**Hand protection:** Protective gloves.  
**Eye protection:** Safety glasses. A face-shield, if the situation requires.  
**Skin and body protection:** Protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical state (20°C):** Liquid  
**Form:** clear  
**Color:** Colorless - Almost colorless  
**Odor:** No data available  
**pH:** No data available  
**Melting point/freezing point:** No data available  
**Boiling Point/Range:** 113 °C  
**Flash Point:** 24°C  
**Explosive limits**  
**Lower:** No data available  
**Upper:** No data available  
**Density:** 1.14  
**Solubility:** No data available

## 10. STABILITY AND REACTIVITY

**Stability:** Stable under proper conditions.  
**Reactivity:** No special reactivity has been reported.  
**Incompatible materials:** oxidizing agents  
**Hazardous Decomposition Products:** Carbon monoxide, Carbon dioxide, Hydrogen fluoride

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** No data available  
**Skin corrosion/irritation:** No data available  
**Serious eye damage/irritation:** No data available  
**Germ cell mutagenicity:** No data available  
**Carcinogenicity:**  
**IARC =** No data available  
**NTP =** No data available  
**Reproductive toxicity:** No data available

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**  
**Fish:** No data available  
**Crustacea:** No data available  
**Algae:** No data available  
**Persistence / degradability:** No data available  
**Bioaccumulative potential(BCF):** No data available  
**Mobility in soil**  
**log Pow:** No data available  
**Soil adsorption (Koc):** No data available

## 12. ECOLOGICAL INFORMATION

**Henry's Law constant(PaM<sup>3</sup>/mol):** No data available

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## 14. TRANSPORT INFORMATION

**Hazards Class:** 3: Flammable liquid.  
**UN-No:** 3272  
**Proper shipping name:** Esters, n.o.s.  
**Packing group:** III

## 15. REGULATORY INFORMATION

**Safe management ordinance of dangerous chemical product (State Council announces on January 26, 2002):** Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.

## 16. OTHER INFORMATION

### The reference company name of written contents

**Company:** TCI (Shanghai) DEVELOPMENT CO., LTD.  
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