



# Material Safety Data Sheet

## TEMAc-8 2-(Perfluorooctyl) Ethyl Methacrylate

Revised 03- November-2009

### 1. PRODUCT AND COMPANY IDENTIFICATION

#### Material Identification

**Product name:** TEMA-8  
**Chemical name:** 2-(Perfluorooctyl) ethyl methacrylate  
1*H*,1*H*,2*H*,2*H*-Heptadecafluorodecyl-1-methacrylate  
**Chemical formula:** CH<sub>2</sub>=C(CH<sub>3</sub>)C(O)OCH<sub>2</sub>CH<sub>2</sub>(C<sub>2</sub>F<sub>4</sub>)<sub>4</sub>F  
C<sub>14</sub>H<sub>9</sub>F<sub>17</sub>O<sub>2</sub>

#### Company Identification

**Distributor** Top Fluorochem Co., Ltd.  
Building C2, 3<sup>rd</sup> Floor  
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XinZhuang Industrial Park  
Minhang District  
Shanghai, P. R. China 201108

**Manufacturer** Fuxin Hengtong Fluorine Chemicals Co., Ltd.  
Fuxin Chemicals Community  
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Haizhou District  
Fuxin City, Liaoning Province, P. R. China

**Emergency Call** +86-21-54833399

### 2. COMPOSITION AND INFORMATION ON INGREDIENTS

#### Components

Material	CAS #	EINECS #	TSCA Listed	Weight %
2-(Perfluorooctyl) ethyl methacrylate	1996-88-9	217-877-2	Yes	
2,6-Di- <i>tert</i> -butyl-4-methylphenol	128-37-0	204-881-4	Yes	30 ppm

### 3. HEALTH HAZARD INFORMATION

#### Emergency Overview:

**Irritant:** Irritating to skin, eyes, and respiratory system. May have harmful effects if inhaled or swallowed. Avoid prolonged exposure. Do not breathe vapor. Use caution when handling. Exposure to any chemical should be limited. To the best of our knowledge, the health hazards of this material have not been fully investigated.

For additional information on toxicity, please refer to Section 11.

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#### 4. FIRST AID MEASURES

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<b>Oral Exposure:</b>	If swallowed, wash out mouth with water provided person is conscious. Call a physician.
<b>Inhalation:</b>	Remove victim from source of exposure to fresh air. If breathing is difficult administer oxygen. Seek medical attention.
<b>Skin Contact:</b>	After contact with skin, wash with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. COLD water may be used. Cover the irritated skin with an emollient. Seek medical attention. Wash any contaminated clothing before reusing.
<b>Eye Contact:</b>	Check for and remove any contact lenses. IMMEDIATELY flush eyes with running water for at least 15 minutes while keeping eyes open. COLD water may be used. Seek medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Give water to victim to drink. Seek medical attention.

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#### 5. FIRE FIGHTING MEASURES

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##### Flammable Properties

<b>Flash point:</b>	> 110 °C
<b>Method:</b>	Closed cup

**Extinguishing Media:** Carbon dioxide, dry chemical powder, alcohol or polymer foam.

**Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual Fire and Explosion Hazards/Decomposition of Product:** Emits toxic fumes under fire conditions.

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#### 6. ACCIDENTAL RELEASE MEASURES

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<b>Procedure to Be Followed In Case of Leak or Spill:</b>	Shut off all sources of ignition. Evacuate area.
<b>Personal Precaution(s):</b>	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.
<b>Clean-Up Methods:</b>	Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

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#### 7. HANDLING AND STORAGE

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<b>Handling:</b>	User exposure: do not breathe vapor. Avoid contact with eyes, skin, and clothing.
<b>Storage:</b>	Keep tightly closed. Store at 2 to 8 °C

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

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<b>Engineering Controls:</b>	Use only in a chemical fume hood. Safety shower and eye bath on hand.
<b>Personal Protective Equipment</b>	
<b>Eye/face protection:</b>	Wear safety glasses. Ensure eye bath is at hand.
<b>Respirators:</b>	Self-contained breathing apparatus must be available in case of emergency.
<b>Protective clothing:</b>	Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, and jacket. Ensure ventilation during use. After contact with skin, wash immediately.
<b>Hand protection:</b>	Protective gloves.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Boiling Point</b>	120 °C @ 4 mm Hg
<b>Melting Point</b>	-16 °C
<b>Molecular Weight</b>	532.19 g/mol
<b>Density</b>	1.583 g/mL @ 20 °C
<b>Solubility in Water</b>	0 weight %
<b>pH</b>	3 to 5 @ 20 °C
<b>Odor</b>	Acrylic
<b>Form</b>	Liquid
<b>Color</b>	Colorless
<b>Refractive index</b>	N(D) = 1.3294 @ 25 °C
<b>Flash Point</b>	> 110 °C (closed cup)

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**10. STABILITY AND REACTIVITY**

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<b>Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Heat.
<b>Materials to Avoid:</b>	Strong oxidizing agents. Strong acids.
<b>Hazardous Decomposition Products:</b>	In combustion, emits toxic fumes including carbon monoxide, carbon dioxide, and hydrogen fluoride.
<b>Hazardous Polymerization Reactions:</b>	Unless inhibited, product can polymerize, raising temperature and pressure, possibly rupturing container. Check inhibitor content often adding to melted bulk liquid if needed.

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**11. TOXICOLOGICAL INFORMATION**

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<b>Multiple Routes:</b>	May be harmful by inhalation, ingestion, or skin absorption.
<b>Sensitization:</b>	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.
<b>Signs and Symptoms of Exposure:</b>	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Vapor or mist is irritating to

the eyes, mucous membranes, and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption.

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**12. ECOLOGICAL INFORMATION**

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**No data available.**

**General:**

Take care to prevent chemicals from entering the ground, water courses or drainage systems.

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**13. DISPOSAL CONSIDERATIONS**

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**Appropriate Method of Disposal of Substance or Preparation:**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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**14. TRANSPORTATION INFORMATION**

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<b>Mode</b>	DOT/IMDG/IATA
<b>UN Number</b>	None. Non-hazardous for transport.
<b>Class (Subsidiary)</b>	None. Non-hazardous for transport.
<b>Proper Shipping Name</b>	None. Non-hazardous for transport.
<b>Hazard Label (Subsidiary)</b>	None. Non-hazardous for transport.
<b>Packing Group</b>	None. Non-hazardous for transport.
<b>Shipping Hazard Label</b>	None. Non-hazardous for transport.

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**15. OTHER INFORMATION**

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**Legal Disclaimer:**

For R&D use only. Not for drug, household, or other uses. The previous information is based upon our current knowledge and experience of our product and is not exhaustive. It applies to the product as defined by the specifications. In case of combinations or mixtures, one must confirm that no new hazards are likely to exist. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and integrity of the work environment. Unless noted to the contrary, the technical information applies only to pure product.

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