



Material Safety Data Sheet

TE-12 Perfluorododecyl Ethylene

Revised 03- November-2009

1. PRODUCT AND COMPANY IDENTIFICATION

Material Identification:

Product name: TE-12
Chemical name: Perfluorododecyl ethylene;
1H,1H,2H-Pentacosafuorotetradec-1-ene
Chemical formula: $\text{CH}_2=\text{CH}(\text{CF}_2\text{CF}_2)_6\text{F}$
 $\text{C}_{14}\text{H}_3\text{F}_{25}$

Company Identification:

Distributor Top Fluorochem Co., Ltd.
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Manufacturer Fuxin Hengtong Fluorine Chemicals Co., Ltd.
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2. COMPOSITION AND INFORMATION ON COMPONENTS

Material	Molecular Weight	Amount	EINECS #	CAS #
Perfluorododecyl ethylene	646.13			67103-05-3
4- <i>tert</i> -butylcatechol (inhibitor)	166.22	30 ppm	202-653-9	98-29-3

3. HAZARDS IDENTIFICATION

Emergency Overview

Caution: Irritating to eyes, respiratory system and skin.

4. FIRST AID MEASURES

Oral Exposure: If swallowed, wash out mouth with water provided person is conscious. Call a physician.

Inhalation Exposure:	If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.
Dermal Exposure:	In case of contact, immediately wash skin with soap and copious amounts of water.
Eye Exposure:	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

5. FIRE FIGHTING MEASURES

Flammable Properties

Flash point:	> 110 °C
Autoignition temp:	N/A
Flammability:	none
Extinguishing Media:	Water spray, carbon dioxide, dry chemical powder, or appropriate foam.
Fire fighting instructions:	Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
Specific hazard(s):	Emits toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.
Clean-Up Procedures:	Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE

Handling Requirements:	Do not breathe vapor. Avoid contact with eyes, skin, and clothing.
Storage Conditions:	Store in a cool, dry, well-ventilated area.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls:	Safety shower and eye bath. Mechanical exhaust required.
Personal Protective Equipment	
Eye:	Chemical safety goggles.
Respiratory:	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.
Hand protection:	Compatible chemical-resistant gloves.
General Hygiene Measures:	Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	233 °C at 760 mm Hg
Melting Point	68 °C
Density	1.65 g/mL
pH	Not measured
Form	Solid
Flash Point	> 110 °C (closed cup)
Refractive Index	N/A
Solubility in Water	N/A

N/A = not available

10. STABILITY AND REACTIVITY

Stability:	Stable.
Materials to Avoid:	Strong acids, strong bases and oxidizing agents.
Hazardous Decomposition Products:	Carbon monoxide, carbon dioxide, hydrogen fluoride.
Hazardous Polymerization:	May occur.
Hazardous Polymerization Reactions:	Homopolymerization will not occur. Copolymerization can occur in the presence of free radical sources, heat or UV light.

11. TOXICOLOGICAL INFORMATION

Route Of Exposure

Skin contact:	Causes skin irritation.
Multiple routes:	Vapor or mist is irritating to the eyes, mucous membranes, and upper respiratory tract. May be harmful by inhalation, ingestion, or skin absorption.

Signs And Symptoms Of Exposure:	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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12. ECOLOGICAL INFORMATION

General	Prevent chemicals from entering the ground, water courses, or drainage system.
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13. DISPOSAL CONSIDERATIONS

Disposal:	Dissolve in 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 laws.
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14. TRANSPORTATION INFORMATION

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

Packing Group
Shipping Hazard Label

None. Non-hazardous for transport.

None. Non-hazardous for transport.

15. OTHER INFORMATION

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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