

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Everflon™ ETFE Fluoropolymer Resin P4010

- **Version:** 1.0
- **Revision Date:** 09/29/2026
- **SDS Number:** EF-ETFE-P4010-01

SECTION 1. IDENTIFICATION

- **Product name:** Everflon™ ETFE Fluoropolymer Resin P4010
- **Product code:** P4010
- **SDS-Identcode:** EF-SDS-ETFE-4010

Manufacturer or supplier's details

- **Company name of supplier:** Wuhan Everflon Fluoropolymers Co.,Ltd.
- **Address:** Wuhan, Hubei Province, China
- **Telephone:** 0086-185-7168-9228
- **Emergency telephone:** 0086-185-7168-9228 (24h)

Recommended use of the chemical and restrictions on use

- **Recommended use:** Resin for moulding and/or extrusion.
- **Restrictions on use:** For industrial use only.
Do not use Everflon™ materials in medical applications involving permanent implantation in the human body or contact with internal body fluids or tissues unless agreed to by Seller in a written agreement covering such use.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with 29 CFR 1910.1200

- **Hazards for the product as supplied:** Not a hazardous substance or mixture.

GHS label elements

- **Hazard pictograms:** None required.
- **Signal word:** None required.
- **Hazard statements:** None required.
- **Precautionary statements:** None required.

Other hazards

- **Thermal decomposition vapors:** Thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flu-like symptoms in humans, especially when

smoking contaminated tobacco.

- **Eye contact:** Dust contact with the eyes can lead to mechanical irritation.
- **Skin contact:** Contact with dust can cause mechanical irritation or drying of the skin.

Hazards resulting from reaction with other chemicals under normal conditions of use:

Conditions	Chemicals formed	Hazards
Thermal decomposition at elevated temperatures	Vapors of fluorinated plastics	May cause polymer fume fever with flu-like symptoms in humans, especially when smoking contaminated tobacco.
Thermal decomposition at elevated temperatures	Refer to Section 10 for list of hazardous decomposition products	Hazardous decomposition products will be formed at elevated temperatures.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

- **Substance / Mixture:** Substance
- **Substance name:**
Poly(Ethylene/3,3,4,4,5,5,6,6,6-Nonafluoro-1-Hexene/Tetrafluoroethylene)
- **CAS-No.:** 68258-85-5
- **Components:** No hazardous ingredients according to OSHA HCS (29 CFR 1910.1200).

SECTION 4. FIRST AID MEASURES

- **General advice:** In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
- **If inhaled:** If inhaled, remove to fresh air. Get medical attention if symptoms occur.
- **In case of skin contact:** Wash with water and soap as a precaution. If molten polymer contacts the skin, cool rapidly with cold water; do not attempt to peel polymer from skin. Get medical attention if symptoms occur.
- **In case of eye contact:** If in eyes, rinse well with plenty of water. Get medical attention if irritation develops and persists.
- **If swallowed:** If swallowed, DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.
- **Most important symptoms and effects, both acute and delayed:**
 - Polymer fume fever

- Contact with dust can cause mechanical irritation or drying of the skin.
- Dust contact with the eyes can lead to mechanical irritation.
- **Protection of first-aiders:** No special precautions are necessary for first aid responders.
- **Notes to physician:** Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

- **Suitable extinguishing media:** Water spray, Alcohol-resistant foam, Carbon dioxide (CO₂), Dry chemical.
- **Unsuitable extinguishing media:** None known.
- **Specific hazards during fire fighting:** Exposure to combustion products may be a hazard to health.
- **Hazardous combustion products:** Hydrogen fluoride, carbonyl difluoride, potentially toxic fluorinated compounds, aerosolized particulates, Carbon oxides(CO,CO₂).
- **Specific extinguishing methods:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use water spray to cool unopened containers. Evacuate area.
- **Special protective equipment for fire-fighters:** Wear self-contained breathing apparatus (SCBA) and full protective gear for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Personal precautions, protective equipment and emergency procedures:** Follow safe handling advice (see Section 7) and personal protective equipment recommendations (see Section 8). Avoid dust formation.
- **Environmental precautions:** Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.
- **Methods and materials for containment and cleaning up:** Sweep up or vacuum up spillage and collect in suitable, labeled container for disposal. Avoid dispersal of dust in the air (i.e., avoid clearing dust surfaces with compressed air).

SECTION 7. HANDLING AND STORAGE

Advice on safe handling

- Do not breathe dust or decomposition products.
- Handle in accordance with good industrial hygiene and safety practice.
- Minimize dust generation and accumulation.
- Keep container closed when not in use.
- Processing temperatures should be controlled to prevent thermal degradation. Take care to prevent spills and minimize release to the environment.

Conditions for safe storage

- Keep in properly labeled containers.
- Store in a cool, dry, well-ventilated area in accordance with local/national regulations.

- **Materials to avoid:** Do not store with strong oxidizing agents.
- **Storage stability:** Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Workplace Exposure Limits (Nuisance Dust / Particulates)

Form of Exposure	Value Type	Control Parameters	Basis
Total dust	TWA	50 mppcf / 15 mg/m ³	OSHA Z-3
Respirable fraction	TWA	15 mppcf / 5 mg/m ³	OSHA Z-3
Total dust	PEL	10 mg/m ³	CAL PEL
Respirable fraction	PEL	5 mg/m ³	CAL PEL

Occupational exposure limits of thermal decomposition products

Components	CAS-No.	Value type	Control parameters / Permissible conc.	Basis
Hydrogen fluoride	7664-39-3	TWA	0.5 ppm	ACGIH
		C	2 ppm	ACGIH
		TWA	3 ppm	OSHA Z-2
		C	6 ppm (5 mg/m ³)	NIOSH REL

Carbonyl difluoride	353-50-4	TWA	2 ppm	ACGIH
		STEL	5 ppm	ACGIH
		TWA	2 ppm (5 mg/m ³)	NIOSH REL
		ST	5 ppm (15 mg/m ³)	NIOSH REL
		TWA	2.5 mg/m ³	OSHA Z-1
Carbon dioxide	124-38-9	TWA	5,000 ppm	ACGIH / OSHA Z-1
		STEL	30,000 ppm	ACGIH
Carbon monoxide	630-08-0	TWA	25 ppm	ACGIH
		TWA	35 ppm (40 mg/m ³)	NIOSH REL
		C	200 ppm (229 mg/m ³)	NIOSH REL
		TWA	50 ppm (55 mg/m ³)	OSHA Z-1

Engineering measures

- General and local exhaust ventilation is recommended to maintain vapor and dust exposures below recommended limits.
- Ensure adequate ventilation, especially in confined areas where heating/extrusion takes place.
- Ensure dust-handling systems are designed to prevent the escape of dust into work areas.

Personal protective equipment (PPE)

- **Respiratory protection:** General and local exhaust ventilation is recommended. Where concentrations are above recommended limits or unknown, use appropriate NIOSH/MSHA-approved respirators.
- **Hand protection:** Heat-resistant gloves for thermal processing. Wash hands before breaks and at the end of workday.
- **Eye protection:** Safety goggles or safety glasses with side-shields.
- **Skin and body protection:** Wear suitable protective clothing; skin should be washed after contact.
- **Hygiene measures:** Do not eat, drink, or smoke while handling. Wash hands thoroughly before eating or smoking.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Powder / Pellets
- **Color:** Off-white, translucent
- **Odor:** Odorless
- **Odor Threshold:** No data available
- **pH:** Not applicable
- **Melting point/range:** >230°C(446°F)
- **Initial boiling point and range:** Not applicable
- **Flash point:** Not applicable
- **Evaporation rate:** Not applicable
- **Flammability (solid, gas):** Not classified as a flammability hazard; not expected to form explosive dust-air mixtures.
- **Upper/lower flammability or explosive limits:** Not applicable
- **Vapor pressure:** Not applicable
- **Relative vapor density:** Not applicable
- **Density:** Approx. 1.7g/cm³
- **Solubility:** Insoluble in water
- **Partition coefficient (n-octanol/water):** No data available
- **Autoignition temperature:** No data available
- **Decomposition temperature:** >300°C
- **Viscosity:** Not applicable
- **Explosive properties:** Not explosive
- **Oxidizing properties:** Not classified as oxidizing

SECTION 10. STABILITY AND REACTIVITY

- **Reactivity:** Not classified as a reactivity hazard.
- **Chemical stability:** Stable under normal conditions.
- **Possibility of hazardous reactions:** Can react with strong oxidizing agents. Hazardous decomposition products will form at elevated temperatures.

- **Conditions to avoid:** Excessive heat; temperatures above decomposition thresholds.
- **Incompatible materials:** Strong oxidizing agents.
- **Hazardous decomposition products:**
 - Thermal decomposition: Hydrogen fluoride, Carbonyl difluoride, Carbon dioxide, Carbon monoxide, toxic fluorinated monomers and oligomers.

SECTION 11. TOXICOLOGICAL INFORMATION

- **Information on likely routes of exposure:** Inhalation, Skin contact, Eye contact, Ingestion.
- **Acute toxicity:** Not classified based on available information.
- **Skin corrosion/irritation:** Not classified. Mechanical irritation from dust may occur.
- **Serious eye damage/eye irritation:** Not classified. Mechanical irritation from dust may occur.
- **Respiratory or skin sensitization:** Not classified.
- **Germ cell mutagenicity:** Not classified.
- **Carcinogenicity:**
 - **IARC:** No ingredient of this product present at >0.1% is identified as probable, possible, or confirmed human carcinogen.
 - **OSHA:** Not listed as a regulated carcinogen.
 - **NTP:** Not identified as a known or anticipated carcinogen.
- **Reproductive toxicity:** Not classified.
- **STOT-single exposure:** Not classified.
- **STOT-repeated exposure:** Not classified.
- **Aspiration toxicity:** Not classified.

SECTION 12. ECOLOGICAL INFORMATION

- **Ecotoxicity:** No data available; polymer is insoluble in water and biologically inert.
- **Persistence and degradability:** Insoluble in water; expected to be highly persistent in the environment.
- **Bioaccumulative potential:** Not expected to bioaccumulate due to high molecular weight.
- **Mobility in soil:** Immobility expected due to insoluble solid nature.
- **Other adverse effects:** No data available.

SECTION 13. DISPOSAL CONSIDERATIONS

- **Waste from residues:** Dispose of in accordance with local, state, and national environmental regulations. Do not dispose of waste into sewer systems.
- **Contaminated packaging:** Empty packaging should be taken to an approved waste handling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

- **UNRTDG:** Not regulated as a dangerous good

- **IATA-DGR:** Not regulated as a dangerous good
- **IMDG-Code:** Not regulated as a dangerous good
- **49 CFR (US DOT):** Not regulated as a dangerous good
- **Transport in bulk according to IMO instruments:** Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

- **TSCA / CAS Status:**
Poly(Ethylene/3,3,4,4,5,5,6,6,6-Nonafluoro-1-Hexene/Tetrafluoroethylene) (CAS: 68258-85-5) is listed on the TSCA Inventory.
- **CERCLA Reportable Quantity:** This material contains no components with a CERCLA RQ.
- **SARA 304 / 302 EHS:** No components with a Section 304 or 302 EHS threshold.
- **SARA 311/312 Hazards:** No SARA Hazards.
- **SARA 313:** This material does not contain any chemical components subject to SARA Title III Section 313 reporting.
- **Pennsylvania Right To Know:**
Poly(Ethylene/3,3,4,4,5,5,6,6,6-Nonafluoro-1-Hexene/Tetrafluoroethylene) (CAS: 68258-85-5).
- **California Prop. 65:** WARNING: This product may expose you to trace environmental background levels of chemicals, including perfluorooctanoic acid (PFOA), or carbon monoxide generated upon thermal decomposition. For more information, go to www.P65Warnings.ca.gov.

SECTION 16. OTHER INFORMATION

NFPA 704 & HMIS Ratings

Metric	NFPA 704	HMIS IV
Health	0	0
Flammability	1	1
Instability / Physical Hazard	0	0
Special Hazard	None	/

Rating scale: 0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. It is designed only as guidance for safe

handling, use, processing, storage, transportation, disposal, and release and shall not be considered a warranty or quality specification. The information relates only to the specific material identified at the top of this SDS and may not be valid when used in combination with any other materials or processes.

Wuhan Everflon Fluoropolymers Co.,Ltd.