SAFETY DATA SHEET

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

Product Name: Everflon PTFE Fine Powder F500

Version: 1.0

Revision Date: 10/03/2026

SDS Number: EF-PTFE-F500-001

SECTION 1. IDENTIFICATION

- **Product Name:** Everflon PTFE Fine Powder F500
- **Chemical Name:** Polytetrafluoroethylene (PTFE)
- **CAS-No.:** 9002-84-0
- **SDS-Identcode:** EF500-2026

Manufacturer / Supplier Details

- **Company Name:** Wuhan Everflon Fluoropolymers Co.,Ltd.
- **Address:** Wuhan, Hubei Province, China
- **Telephone:** 0086-185-7168-9228
- **Emergency Telephone:** 0086-185-7168-9228

Recommended Use and Restrictions on Use

- **Recommended Use:** Resin for paste extrusion, moulding, wire & cable insulation, tubing, and tapes.
- **Restrictions on Use:** Do not use 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 prior written agreement covering such specific use.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

In accordance with 29 CFR 1910.1200:

Not a hazardous substance or mixture.

GHS Label Elements

No hazard pictogram, no signal word, no hazard statement(s), and no precautionary statement(s) required.

Other Hazards

- **Thermal Decomposition:** The thermal decomposition vapors of fluorinated plastics may cause polymer fume fever with flu-like symptoms (chills, fever, cough, shortness of breath) in humans, especially when smoking contaminated tobacco products.
- **Mechanical Irritation:** Dust contact with eyes or skin can cause mechanical irritation or drying.

Reaction with Other Chemicals under Normal / Elevated Conditions:

Conditions	Chemicals Formed	Hazards
Thermal decomposition at elevated temperatures (> 320°C / > 608°F)	Fluorinated hydrocarbon vapors, HF, Carbonyl difluoride	May cause polymer fume fever; toxic and corrosive vapors.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

- **Substance / Mixture:** Substance
- **Chemical Nature:** Fluoropolymer

Chemical Name	CAS-No.	Concentration (% w/w)
Polytetrafluoroethylene (PTFE)	9002-84-0	100%

No hazardous ingredients required to be listed at supplied concentration.

SECTION 4. FIRST AID MEASURES

- **General Advice:** In 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 person to fresh air. If symptoms develop or persist, get medical attention.
- **In Case of Skin Contact:** Wash thoroughly with soap and water. If irritation develops or persists, seek medical attention. If molten polymer contacts skin, cool immediately with cold water. Do not attempt to peel polymer from skin; obtain prompt medical attention.

- **In Case of Eye Contact:** Rinse immediately and thoroughly with water, holding eyelids open. Get medical attention if irritation persists.
- **If Swallowed:** If swallowed, DO NOT induce vomiting. Rinse mouth thoroughly with water. Get medical attention if symptoms occur.
- **Most Important Symptoms/Effects:** Polymer fume fever (from inhalation of decomposition fumes); mechanical irritation of the skin and eyes caused by dust.
- **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 (CO_2), dry chemical.
- **Unsuitable Extinguishing Media:** None known.
- **Specific Hazards During Fire Fighting:** PTFE will burn in pure oxygen environments or under high heat flux, producing toxic and corrosive decomposition products. Exposure to combustion products may be a hazard to health.
- **Hazardous Combustion Products:** Hydrogen fluoride, carbonyl difluoride, aerosolized fluorinated particulates, carbon oxides (CO, CO_2).
- **Specific Extinguishing Methods:** Use extinguishing measures appropriate to local circumstances and surrounding environment. Cool unopened containers with water spray. Remove undamaged containers if safe to do so. Evacuate personnel to safe areas.
- **Special Protective Equipment for Firefighters:** Wear full personal protective gear and a self-contained breathing apparatus (SCBA) approved for chemical fires.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- **Personal Precautions, Protective Equipment and Emergency Procedures:** Follow safe handling advice and wear appropriate personal protective equipment (see Sections 7 and 8). Avoid breathing dust.
- **Environmental Precautions:** Prevent further spillage if safe to do so. Avoid discharge into drains, watercourses, or the soil.
- **Methods and Materials for Containment and Cleaning Up:** Sweep up or vacuum up spillage using equipment with appropriate HEPA filtration. Collect in a suitable closed container for disposal. Avoid dispersal of dust into air (e.g., avoid dry sweeping or compressed air blowdown).

SECTION 7. HANDLING AND STORAGE

- **Technical Measures:** See engineering controls under Section 8.

- **Local / Total Ventilation:** Use only with adequate ventilation. Local exhaust is recommended at processing equipment where heating or dust generation occurs.
- **Advice on Safe Handling:**
  - Do not breathe dust or decomposition vapors.
  - Avoid smoking or carrying tobacco products in processing areas; contamination of tobacco with PTFE can cause polymer fume fever.
  - Minimize dust generation and accumulation.
  - Keep container tightly closed when not in use.
  - Wash hands thoroughly after handling.
- **Conditions for Safe Storage:** Store in original, properly labeled containers in a dry, cool, and well-ventilated place. Keep away from direct sunlight and incompatible materials.
- **Incompatible Materials:** Strong oxidizing agents, molten alkali metals, finely divided aluminum or magnesium at high temperatures.
- **Storage Stability:** Stable under recommended storage conditions.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits

Particulates Not Otherwise Regulated / Nuisance Dust:

Source	Exposure Form	Value / Permissible Concentration
OSHA PEL (Z-3)	Total dust	$15 mg/m^3$ $(50 mppcf)$
OSHA PEL (Z-3)	Respirable fraction	$5 mg/m^3$ $(15 mppcf)$
Cal/OSHA PEL	Total dust	$10 mg/m^3$
Cal/OSHA PEL	Respirable dust fraction	$5 mg/m^3$

Thermal Decomposition Products:

Components	CAS-No.	Value Type	Control Limits	Source
Hydrogen	7664-39-3	TWA	$0.5 ppm$	ACGIH

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

Engineering Controls

- Ensure adequate ventilation, especially in confined spaces.
- Ensure processing equipment is vented to the outside when heating resin above

300°C.
- Dust extraction systems should be properly maintained and filtered.

Personal Protective Equipment (PPE)

- **Respiratory Protection:** If engineering controls do not maintain airborne concentrations below limits or if handling fine powder creates visible dust, wear an approved particulate respirator (e.g., N95/P100). Use positive-pressure air-supplied respirators if decomposition fumes or high uncontrolled releases are possible.
- **Hand Protection:** Wear heat-resistant gloves during processing operations involving hot material. For general handling, chemical/mechanical protective gloves are recommended.
- **Eye Protection:** Safety goggles with side shields conforming to ANSI Z87.1 / EN 166.
- **Skin and Body Protection:** Long-sleeved work clothing. Wash skin thoroughly after handling.
- **Hygiene Measures:** Do not eat, drink, or smoke while handling. Wash hands before breaks and at the end of workday. Wash contaminated clothing before reuse.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** Solid, fine powder
- **Color:** White
- **Odor:** Odorless
- **Odor Threshold:** No data available
- **pH:** Not applicable
- **Melting Point / Freezing Point:** > 320°C (> 608°F)
- **Initial Boiling Point / 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.
- **Explosion Limits:** No data available
- **Vapor Pressure:** Not applicable
- **Relative Vapor Density:** Not applicable
- **Density:** $2.14 - 2.20 g/cm^3$
- **Water Solubility:** Insoluble
- **Partition Coefficient (n-octanol/water):** No data available
- **Auto-ignition Temperature:** No data available
- **Decomposition Temperature:** > 320°C (> 608°F)

- **Viscosity:** Not applicable
- **Explosive Properties:** Not explosive
- **Oxidizing Properties:** The substance is not classified as oxidizing.

SECTION 10. STABILITY AND REACTIVITY

- **Reactivity:** Not classified as a reactivity hazard under normal handling and storage conditions.
- **Chemical Stability:** Stable under recommended storage conditions.
- **Possibility of Hazardous Reactions:** Reaction with strong oxidizing agents. Thermal decomposition begins to evolve hazardous gaseous degradation products above 320°C.
- **Conditions to Avoid:** Elevated temperatures above processing guidelines (> 320°C / > 608°F). Contamination with combustible materials and tobacco.
- **Incompatible Materials:** Strong oxidizing agents, alkali metals (e.g., molten sodium), fluorine.
- **Hazardous Decomposition Products:** Hydrogen fluoride (HF), Carbonyl difluoride (COF_2), Carbon monoxide (CO), Carbon dioxide (CO_2), and perfluorinated oligomers.

SECTION 11. TOXICOLOGICAL INFORMATION

Exposure Routes

Inhalation, eye contact, skin contact, ingestion.

- **Acute Toxicity:** Not classified based on available information.
- **Skin Corrosion / Irritation:** Mechanical irritation caused by fine particles. Not chemically corrosive or irritating.
- **Serious Eye Damage / Irritation:** Mechanical eye irritation caused by fine dust particles.
- **Respiratory or Skin Sensitization:** Not classified based on available information.
- **Germ Cell Mutagenicity:** Not classified based on available information.
- **Carcinogenicity:**
  - **IARC:** No component of this product is identified as probable, possible, or confirmed human carcinogen.
  - **OSHA:** No component is listed on OSHA's list of regulated carcinogens.
  - **NTP:** No component is identified as a known or anticipated carcinogen.
- **Reproductive Toxicity:** Not classified based on available information.
- **STOT - Single Exposure:** Not classified based on available information. Inhalation of decomposition fumes can cause polymer fume fever.
- **STOT - Repeated Exposure:** Not classified based on available information.
- **Aspiration Toxicity:** Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

- **Ecotoxicity:** No ecotoxicity data available; PTFE is biologically inert and virtually insoluble in water.
- **Persistence and Degradability:** Polytetrafluoroethylene is inert and highly persistent in the environment; it does not biodegrade.
- **Bioaccumulative Potential:** Due to high molecular weight and water insolubility, bioaccumulation is not expected.
- **Mobility in Soil:** Solid polymer particles remain insoluble and have negligible mobility in soil.
- **Other Adverse Effects:** None known.

SECTION 13. DISPOSAL CONSIDERATIONS

- **Waste from Residues:** Dispose of in accordance with local, state, and national environmental regulations. Can be incinerated in a licensed facility equipped with scrubbers for acid gases (HF). Do not discharge into natural waterways or municipal sewers.
- **Contaminated Packaging:** Empty containers should be cleaned and recycled where facilities exist, or disposed of in accordance with local regulations.

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:** Not applicable for product as supplied.
- **Special Precautions for User:** Keep dry during transport. Avoid tearing containers.

SECTION 15. REGULATORY INFORMATION

- **TSCA:** Listed on the TSCA Inventory.
- **CERCLA RQ:** This material does not contain any components with a CERCLA RQ.
- **SARA 302/304:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302/304.
- **SARA 311/312 Hazards:** No SARA Hazards.
- **SARA 313:** This product does not contain any toxic chemical subject to the reporting requirements of Section 313 of SARA Title III.
- **California Prop. 65:**
    - *Note:* This product is not manufactured with PFOA or other intentionally added perfluorooctanoic acids. Trace background levels of environmental impurities may be detected below regulatory thresholds.

SECTION 16. OTHER INFORMATION

NFPA 704 & HMIS Ratings

- **Health:** 1 (Slight)
- **Flammability:** 1 (Slight)
- **Instability / Physical Hazard:** 0 (Minimal)
- **Special Hazard:** None

Abbreviations and Acronyms

- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **CAS:** Chemical Abstracts Service
- **GHS:** Globally Harmonized System of Classification and Labelling of Chemicals
- **IARC:** International Agency for Research on Cancer
- **IATA:** International Air Transport Association
- **IMDG:** International Maritime Dangerous Goods
- **NIOSH:** National Institute for Occupational Safety and Health
- **OSHA:** Occupational Safety and Health Administration
- **PEL:** Permissible Exposure Limit
- **REL:** Recommended Exposure Limit
- **STEL:** Short Term Exposure Limit
- **TLV:** Threshold Limit Value
- **TWA:** Time-Weighted Average

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. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.