

Material Safety Data Sheet of Polytetrafluoroethylene Fine Powder

SECTION 1 Product and Company Identification

Product Chinese Name: 聚四氟乙烯分散树脂

(DF-201、DF-201F、DF-203F、DF-203SF、DF-204F、DF-204SF、DF-206、DF-2041F、
DF-2048F、DF-635、DF-645、DF-636、DF-204XF、DF-2049、DF-2046CF etc series)

Product English Name: Polytetrafluoroethylene fine powder

Company: Shandong Dongyue Polymer Material Co. Ltd.

Address: Tangshan town, Huantai County, Zibo City

Postcode: 256401

E-mail: GFZANHUANBU@dongyuechem.com

TEL: 0533-8510456

Fax: 0533-8520566

Emergency Phone: 0533-8520305

Technical Specification Code: GFZ-016

Recommended and Restricted Uses: Anti-corrosion, sealing, insulation, lubrication in electronics、electrical, chemistry, machinery, aerospace and other advanced sciences.

SECTION 2 Hazards Identification

Emergency Summary: Isolate the contaminated area and cut off the source of fire. It is recommended that emergency personnel wear general work clothing, collect the leaks in special containers and avoid dust, transfer to safe and suitable places for disposal. Please wear positive pressure breathing apparatus in case of fire or open flame.

Physical and Chemical Hazards: This product power can form explosive mixtures and will explode in case of mars when it reaches a certain concentration. Release fluoride gas when heating decomposition.

Health Hazards: This product is harmless to human body, pyrolysis products of polytetrafluoroethylene increased with increasing heating temperature. Pyrolysis products if breathed in will cause fever and common cold liked syndrome, severe cases present with respiratory irritation, main manifestations chemical of bronchitis, pneumonia, even pneumochysis and myocardial damage. A long term exposure to low-concentration thermal decomposed products often cause headaches, dizzy, insomnia, nightmares, memory deterioration, fatigue and backache.

Hazard Category According to GHS: Not a hazardous substance

Storage: Keep the container tightly closed, store in a cool, dry, ventilated warehouse, avoid direct sunlight, and keep away from fire and heat sources. Do not mix with oxidants and flammable materials.

Disposal Considerations: The waste materials transfer to special containers, recycle or transport to waste disposal sites for disposal in accordance with relevant laws and regulations.

SECTION 3 Composition/Information on Ingredients

substance ☒

mixtures

Component	Concentration	CAS No.
Polytetrafluoroethylene	≥99.97	9002-84-0

SECTION 4 First Aid Measures

Skin Contact: No data available

Eye Contact: Immediately filed palpebral, with plenty of liquid water or saline thoroughly flushed at least 15 minutes. Get medical attention.

Inhalation: Move to fresh air quickly if breathe in pyrolysis products and keep upper airway patency. If feel that it is difficult to breath, please offer oxygen. If not breathing, give artificial respiration immediately. Get medical attention.

Ingestion: No data available

SECTION 5 Fire-Fighting Measures

Specific Hazards: Product power can form explosive mixtures. It will explode in case of mars when reach a certain concentration. Release fluoride gas when heated.

Suitable Extinguishing Media: This is flame retardant material, please select appropriate extinguishing media according to the specific burning debris.

Specific Extinguishing Method: Transfer container from fireground to the open air. Treat with mist water, foam, dry powder, carbon dioxide fire extinguishing agent or sand.

SECTION 6 Accidental Release Measures

Personal Precautions、Protective Equipment and Emergency Procedures: Isolate contaminated area and cut off fire source. Emergency personnel should wear dust masks and general work clothes,sweep up carefully and avoid dust, collect them in suitable container, transfer to safe places for disposal. If a large amount of leak, cover with plastic cloth or canvas. Collect them and recycle or transport to suitable disposal site for disposal according to local or national laws and regulations.

Environmental Precautions: Collect the leakage, avoid environment pollution. Do not let product enter drains, surface water and ground water.

Methods and Materials for Containment and Cleaning Up: Collect the leakage in suitable containers and avoid dust. Do not flush into the soil or sewer. Collect them and recycle or transport to suitable disposal site for disposal according to local or national laws and regulations.

Preventive Measures to Prevent Secondary Hazards: Strengthen vigilance and ventilation at the scene, prohibit irrelevant personnel from entering, and prohibit all fire operations.

SECTION 7 Handling and Storage

Handling: Use ventilation system to provide good ventilation. Operators must be specially trained and strictly abide by the operating procedures. Operators are advised to wear self-inhalation filter type dust mask. Away from fire and heat sources, smoking is strictly prohibited in the workplace. Avoid producing dust and contacting with oxidants. To avoid the vessel leakage, you must be light load and unload. Equip with fire and emergency leakage equipment.

Storage: Store in a cool, ventilated warehouse. Keep away from fire and heat. Material should be kept away from oxidizer. Warehouse should be equipped with fire equipment, suitable container to contain the leakage.

SECTION 8 Exposure Controls/Personal Protection

Maximum Acceptable Concentration: No data available

Chinese MAC(mg/m³): No standard

Former Soviet Union MAC(mg/m³): 10

TLVTN: Polytetrafluoroethylene decomposition products

TLVWN: No standard

Monitoring Method: No data available

Engineering Control: Closed operation. Provide good ventilation.

Respiratory Protection: Please wear self-inhalation filter type dust mask if the dust concentration is higher.

Eye Protection: Wear chemical safety glasses if necessary.

Body Protection: Wear general work clothing.

Hand Protection: Wear general work protective gloves.

Other Protection: No smoking at work scene. Maintain good hygiene.

SECTION 9 Physical and Chemical Properties

Appearance: White powder	Odor: No data available
pH: No data available	Melting Point/Freezing Point(°C): 327±10
Boiling Point(°C): No data available	Flash Point(°C): No data available
Vapor Pressure(KPa): No data available	Thermal Instability Index: ≤60
Relative Density(water=1): ≥2.140	Solubility: No data available
Decomposition Temperature(°C): ≥350 start to break down	Ignition Temperature(°C): 670
Water Content: ≤0.030%	Flammability: Low flammability
Critical Temperature(°C): No data available	Critical Temperature(MPa): No data available

SECTION 10 Stability and Reactivity

Stability: Stable

Hazardous Reactions: No data available

Conditions to Avoid: Heat, sunlight exposure, fire

Materials to Avoid: Strong oxidizers

Hazardous Decomposition Products: Perfluoroisobutylene, other fluoride gases

SECTION 11 Toxicological Information

Acute Toxicity:**LD50:** No data available**LC50:** No data available**Subacute and Chronic Toxicity:** No data available **Irritation:** No data available**Sensitization:** No data available**Mutagenicity:** No data available**Teratogenicity:** No data available**Carcinogenicity:** No data available**SECTION 12 Ecological Information****Toxicity:** No data available**Persistence and Degradability:** No data available**Bioaccumulative Potential:** No data available**Mobility in Soil:** No data available**SECTION 13 Disposal Considerations**

Waste Treatment Methods: Please refer to relevant national and local regulations before disposal.

Disposal Considerations: Do not dump at will, please refer to relevant national and local regulations before disposal.

SECTION 14 Transport information**Dangerous Goods Code:** No data available**UN Number:** No data available**Packing Mark:** No data available**Kind of Package:** Z01**Packing Method:** Barrel with iron lid, full paper barrel, carton.

Special Precautions: Packaging must be complete, loading should be secure before transport. Ensure the containers do not leak, collapse, fall and damage. Prohibit to

mix and transport with oxidants. Avoid direct sunlight, rain and high temperature in the transport process.

SECTION 15 Regulatory Information

Regulatory Information: The following laws, regulations, rules and standards provide the product information about the safe production, use, storage, transportation, loading and unloading, classification and marking, packaging, occupational hazards etc. Production Safety Law of the People's Republic of China(Revised version, September 1, 2021), Law of the People's Republic of China on the Prevention and Control of Occupational Diseases (Revised version, 2018), Hazardous Chemicals Catalog (Revised version, 2015), Guidance on the Compilation of Safety Data Sheet for Chemical Products(GB/T17519-2013), Safety Data Sheet for Chemical Products-Content and Order of Sections(GB/T16483-2008), General Specifications for Transport Packages of Dangerous Goods(GB12463-2009), Occupational Exposure Limits for Hazardous Agents in the Workplace-Chemical Hazardous Agents(GBZ2.1-2019), General Rule for Classification and Hazard Communication of Chemicals(GB13690-2009), Chemical Classification and Labeling Specifications(part 2-29)(GB30000-2013) etc.

SECTION 16 Other Information

Revision Date: 25-July-2022

Revision Department: Safety and Environmental Protection Department, Shandong Dongyue Polymer Material Co. Ltd.

Review Department: Technology Department, Shandong Dongyue Polymer Material Co. Ltd.

Edit Description: This SDS is compiled according to national standards, include Safety Data Sheet for Chemical Products-Content and Order of Sections(GB/T 16483-2008), Guidance on the Compilation of Safety Date Sheet for Chemical Products(GB/T17519-2013), Material Safety Date Sheet of Dangerous Chemicals(Third edition, 2017).

Disclaimer: The MSDS applies to specified products, unless otherwise indicated, does not apply to mixtures of this product with other substances. The MSDS provide safety information for those who appropriately trained personnel about this product. Users of this MSDS must make independent judgments on the suitability of this MSDS under special conditions. Under special cases, the author of this MSDS will not be held responsible for any damage caused by the use of this MSDS.