

# Material Safety Data Sheet of Polytetrafluoroethylene Dispersion

## SECTION 1 IDENTIFICATION

**Product Name:** Polytetrafluoroethylene/PTFE dispersion

**Other Name:** /

**Recommended use of the chemical and restrictions on use:** Paint, Impregnation, Anti-dripping agent, Battery, Spinning, etc.

**Manufacturer's details:**

QUZHOU DFS CHEM CO., LTD

NO 95, Changqian Road, Kecheng, Quzhou , Zhejiang,

China **Emergency phone number:** +86-010-84340783/  
84340782

## SECTION 2 HAZARDS IDENTIFICATION

**Emergency Summary:** Isolate and decontaminate the contaminated area, cut off the source of fire. It is recommended that emergency personnel wear protective masks and rubber gloves, collect them in special containers, and transfer to safe and suitable places for disposal according to relevant national laws and regulations.

**Physical and Chemical Hazards:** Corrosiveness liquid, please wear necessary labor protection products, avoid contacting with strong oxidants during storage and use.

**Health Hazards:** Basic product, you need to wear protective masks and rubber gloves during the operation. Pyrolysis products of polytetrafluoroethylene increased with increasing heating temperature, pyrolysis products if breathed in will cause fever and common cold like syndrome, severe cases present with respiratory irritation, main manifestations chemical of bronchitis, pneumonia, even pneumoconiosis 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 or mixture.

**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

Chemical Name	CAS No.	Concentration%
Polytetrafluoroethylene	9002-84-0	60 ± 2
Ammonium Hydroxide	1336-21-6	Trace
Water	7732-18-5	33.2-39.6

## SECTION 4 FIRST AID MEASURES

### Description of necessary first aid measures

**Skin Contact:** Skin contact may cause discomfort.

**Eye Contact:** Eye contact may cause discomfort, tears or blurred vision. Immediately flush 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:** Release fluoride gas when heated.

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

**Special 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, cut off fire source. Emergency personnel should wear protective masks and rubber gloves, collect them in plastic containers, transfer to suitable places for disposal, and decontaminate the contaminated area.

**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:** Recover product wherever possible. IF DRY: Use dry clean up procedures and avoid generating dust. Collect residues and place in sealed plastic bags or other containers for disposal. IF WET: Vacuum/shovel up and place in labelled containers for disposal. ALWAYS: Wash area down with large amounts of water and prevent runoff into drains.

**Slight Leakage:** Collect the leakage in sealed container. Absorb with sand, activated carbon or other inert materials, and transport to safe places. Do not flush into sewer.

**Serious Leakage:** Build dyke or dig holes to collect. Close the drain line. Transfer the leakage to tank car or special container with explosion-proof pump, 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

**Precautions for safe handling:** Use ventilation system to provide good ventilation. Operators must be specially trained and strictly abide by the operation procedures. Operators are advised to wear protective masks and rubber gloves. 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/m<sup>3</sup>):** No standard.      **Former Soviet Union MAC (mg/m<sup>3</sup>):**  
10. TLVTN: No data available      TLVWN: No  
standard

**Monitoring Method:** No data available

**Engineering Control:** Confined operation. Provide good ventilation.

**Respiratory Protection:** Please wear positive pressure breathing apparatus if the ventilation condition on site is not good during processing.

**Eye Protection:** Wear chemical safety goggles if necessary.

**Body Protection:** Wear general work clothing.

**Hand Protection:** Wear rubber protective gloves.

**Other Protection:** No smoking at work site. Maintain good hygiene.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance and Physical State:</b> Milk white or light yellow emulsion	<b>Odor:</b> No data available
<b>PH:</b> 7.0-11.0	<b>Melting Point/Freezing Point (°C):</b> No data available
<b>Boiling Point (°C):</b> No data available	<b>Flash Point (°C):</b> No data available
<b>Upper Explosion Limit/ % (V/V):</b> No data available	<b>Lower Explosion Limit/ % (V/V):</b> No data available
<b>Solid Content (PTFE):</b> 60.0 ± 2%	<b>Viscosity(25 ± 1)°C/m Pa.s:</b> 12.0-30.0
<b>Relative Density (water=1):</b> 1.484-1.532	<b>Surfactant Mass Fraction/ %:</b> 4.0-8.0 (Base on PTFE)
<b>Octanol/Water Partition Coefficient:</b> No data available	<b>Ignition Temperature (°C):</b> No data available
<b>Decomposition Temperature (°C):</b> No data available	<b>Odor Threshold:</b> No data available
<b>Evaporation Rate:</b> No data available	<b>Flammability:</b> Low flammability
<b>Critical Temperature (°C):</b> No data available	<b>Critical Pressure (MPa):</b> 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 oxidants.

## SECTION 11 TOXICOLOGICAL INFORMATION

**Hazardous decomposition products:** Perfluoroisobutylene, other fluoride gases.

**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:** /

**Persistence and degradability:** /

**Bioaccumulative potential:** /

**Mobility in soil:** /

**Other adverse effects:** /

## 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**

Labels Required

Marine Pollutant

HAZCHEM

: NO

: Not Applicable

**Land transport (ADR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

14.1 UN number	Not Applicable	
14.2 UN proper shipping name	Not Applicable	
14.3 Transport hazard class(es)	Class	Not Applicable
	Subrisk	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Hazard identification (Kemler)	Not Applicable
	Classification code	Not Applicable
	Hazard Label	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Hazard identification (Kemler)	Not Applicable

## Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1. UN number	Not Applicable	
14.2 UN proper shipping name	Not Applicable	
14.3 Transport hazard class(es)	ICAO/IATA Class	Not
	ICAO / IATA Subrisk	Not Applicable
	ERG Code	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	Not Applicable
	Cargo Only Packing Instructions	Not Applicable
	Cargo Only Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Packing Instructions	Not Applicable
	Passenger and Cargo Maximum Qty / Pack	Not Applicable
	Passenger and Cargo Limited Quantity Packing Instructions	Not Applicable
	Passenger and Cargo Limited Maximum Qty / Pack	Not Applicable

## Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1 UN number	Not Applicable	
14.2 UN proper shipping name	Not Applicable	
14.3 Transport hazard class(es)	IMDG Class	Not
	IMDG Subrisk	Not
14.4. Packing group	Applicable	Not Applicable
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	Not
	Special provisions	Not Applicable
	Limited Quantities	Not Applicable

## Inland waterways transport (ADN): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

14.1 UN number	Not Applicable	
14.2 UN proper shipping name	Not Applicable	
14.3 Transport hazard class(es)	Not Applicable	
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Classification code	Not Applicable
	Special provisions	Not Applicable
	Limited quantity	Not Applicable
	Equipment required	Not Applicable
	Fire cones number	Not Applicable

## SECTION 15 REGULATORY INFORMATION

### Regulations 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, 2014), 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 (GBZ2.1-2007), 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:** 08-May-2024

**Revision Department:** Safety and Environmental Protection Department, QUZHOU DFS CHEM CO., LTD

**Review Department:** Technology Department, QUZHOU DFS CHEM 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/T16483-2008), Guidance on the Compilation of Safety Data Sheet for Chemical Products (GB/T17519-2013), Material Safety Data 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.