PVDF Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Chemical Name: poly(1,1-difluoroethylene)
Company Name: Shandong Lecron Industrial Development Group Co., Ltd
Address: No. 366 Huaguang Road, Zhangdian District, Zibo City, Shandong, China.
EMERGENCY PHONE NUMBERS:: 0533-2342925
DOC Code.: HA-015
Recommended use of the chemical and restrictions on use: This material can be used in machinery, electronic, chemical industries, etc.

2. HAZARDS IDENTIFICATION

Physical and chemical hazards: This product is not flammable. It can cause combustion when exposed to high heat, open flames and strong oxidants. It can be decomposed when burned to produce a special pungent odor. Polyvinylidene fluoride is a poor conductor, and it is easy to generate static charges during storage and transportation, which can cause fire. Dust or vapour mixes with air or oxidant to form an explosive mixture.
Health hazards: Contact with this substance at room temperature generally does not cause health hazards. The substance may decompose and produce fluorine-containing toxic gas at high temperature, which can cause high-temperature burns and irritating reactions.
Environmental precautions: Do not enter into spillage area. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
GHS hazard category: This material is not classified as hazardous under General Rules for Classification and Hazard Publicity of Chemicals (GB 13690-2009) and Series Standards for Chemical Classification and Labeling (GB 30000)
Label elements: /
Pictograms: /
Hazard information: /
Safety precaution:
Preventive measures: airtight operation, pay attention to ventilation, keep away from high heat, and strictly forbid collision. The operation is as mechanized and automated as possible. Operators must be specially trained to read and understand all preventive measures. Use personal protective equipment as required. Strictly follow the operating procedures. It is recommended that operators wear self-priming filter gas masks (full face masks), rubber protective work clothes, and rubber protective gloves. Prevent dust from leaking into the air in the workplace. Avoid contact with oxidants. When handling, please care to prevent damage to packaging and containers. Eating and drinking are not allowed in the workplace.

Accident response:

This product is not flammable. If a high-temperature fire occurs, foam, dry powder, sand, etc. can be used to extinguish the fire.

If skin contact: Take off contaminated clothing and wash skin thoroughly with soap and water.

If eye contact: Lift the eyelid and rinse with running water or normal saline. Get medical attention.

If inhalation: If the thermal decomposition gas is inhaled, quickly leave the scene to a place with fresh air. Keep the airway unobstructed. If breathing is difficult, give oxygen. If breathing stops, give artificial respiration immediately. Get medical attention.

If ingestion: Drink enough warm water to induce vomiting. Get medical attention.

Contaminated clothing should be cleaned before use.

Safe storage: Keep container tightly closed. Store in a cool, dry and ventilated warehouse. Keep away from fire sources. Mixed storage with oxidant is strictly prohibited.

Disposal: It is recommended to use controlled incineration for disposal.

3. INGREDIENTS/COMPOSITION INFORMATION

Substance☼ Mixture□

Ingredient Name	Concentration，%	CAS No.
Polyvinylidene fluoride	≥99	24937-79-9

4. FIRST AID MEASURES

If skin contact: Wash off with soap and plenty of water. Get medical attention immediately.

If eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and get medical attention immediately.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

If Ingestion: Rinse mouth with water. Induce vomit. Get medical attention immediately.

Most important symptoms/effects, acute and delayed: /

Indication of immediate medical attention and special treatment needed, if necessary: /

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use foam, chemical power or water.

Special hazards arising from the chemical: The material may decompose in fire and high temperature.

Special protective actions for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary. Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.
Environmental precautions: Do not enter into spillage area. Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up: Contain spillage, and then collect in a clean container according to local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling: Wear protective gloves/eye protection/face protection/protective clothing. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking.
Conditions for safe storage, including any incompatibilities: Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from flammable materials and oxidizer.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit: /
Monitoring method: /
Biological limit value: /
Monitoring method: /
Engineering control: airtight operation, pay attention to ventilation. Be as mechanized and automated as possible. Provide safety shower and eyewash equipment.
Respiratory protection: wear a self-priming filter dust mask (full face mask) or air respirator when you may be exposed to its dust. In case of emergency rescue or evacuation, it is recommended to wear an oxygen respirator
Eye protection: wear safety glasses.
Skin and body protection: wear rubber resistant protective overalls.
Hand protection: Wear rubber resistant protective gloves.
Other protection: smoking, eating and drinking are prohibited at the work site. After work, take a shower. Store clothes contaminated by poisons separately and wash them for later use. Maintain good hygiene.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/Odor: White solid powder, Odorless
PH: /
Specific Gravity: 1.80
Vapor Pressure: /

Vapor Density: /

Melting Point (℃): 166-170
Freezing Point: /
Boiling Point: /
Solubility In Water: /
Evaporation Rate: /
Percent Volatile: /

10. STABILITY AND REACTIVITY

Reactivity: /
Chemical stability: The material is stable in normal temperature.
Possibility of hazardous reactions: /
Conditions to avoid: Spark and static electricity.
Incompatible materials: Strong oxidizer and flammable materials.
Hazardous decomposition products: /

11. TOXICOLOGICAL INFORMATION

Acute toxicity: /.
Skin irritation or corrosion: /.
Eye irritation or corrosion: /.
Respiratory or skin sensitization: /.
Germ cell mutagenicity: /.
Carcinogenicity: /.
Reproductive toxicity: /.
Specific target organ toxicity-single exposure: /.
Specific target organ toxicity-repeated exposure: /.
Aspiration hazard: /.

12. ECOLOGICAL INFORMATION

Toxicity: /
Persistence and degradability: /
Bioaccumulative potential: /
Mobility in soil: /
Other adverse effects: /

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Product: It is recommended to use the controlled incineration method for disposal, and the fluoride produced by incineration should be removed with an acid scrubber.

Unclean packaging: It is recommended to contact the manufacturer and return the empty container to the manufacturer.
Disposal precautions: Refer to national and local regulations before disposal, and evacuate non-related personnel. Operators wear protective equipment and avoid direct contact.

14. TRANSPORT INFORMATION

UN NO.: /
UN shipping name: Polyvinylidene fluoride
UN risk classification: /
Packaging mark: /
Packing category: Class III
Packing group, if applicable: /
Environmental hazards: /
Special precautions for user: /

15. REGULATORY INFORMATION

Regulations: This safety data sheet is in compliance with the following national standards: "Safety Production Law of the People's Republic of China" (promulgated by Order No. 88 of the President of the People's Republic of China on June 10, 2021), "Occupational Disease Prevention and Control Law of the People's Republic of China" (No. 2 of the Standing Committee of the Ninth National People's Congress on October 27, 2018) Adopted at the 14th meeting), "Regulations on the Safety Management of Hazardous Chemicals" (revised and adopted at the 144th executive meeting of the State Council on February 16, 2011, and implemented as of December 1, 2011), "Regulations on the Safe Use of Chemicals in Workplaces" "([1996] Ministry of Labor Issued No. 423), "Administrative Measures for the Registration of Hazardous Chemicals" (State Administration of Work Safety Order No. 53), "Chemical Safety Technical Manual Content and Item Sequence" (GB/T 16483-2008) , "General Technical Requirements for Transport and Packaging of Dangerous Goods" (GB 12463-2009), "Dangerous Goods Packaging Marks" (GB 190-2009), "Methods for Classification of Dangerous Goods Transport Packaging Categories" (GB/T 15098-2008), "Dangerous Goods Goods Classification and Product Name Numbers (GB 6944-2012), Occupational Exposure Limits for Hazardous Factors in Workplaces, Chemical Hazardous Factors (GBZ 2.1-2007), General Rules for Classification and Hazard Publicity of Chemicals (GB 13690-2009), Series of Standards for Classification and Labeling of Chemicals (GB 30000)

16. OTHER INFORMATION

Issued date: Dec 20, 2021
Issued by: Shandong Lecron Industrial Development Group Co., Ltd
Approved by: following（GB/T 16483-2008）