

SAFETY DATA SHEET

Fusil 220

1. Chemicals and Company Identification

Commercial product name: fumed silica Fusil 220
Product common name: silicon dioxide
Company: Dalian Fuchang Chemical Co., Ltd.
Address: NO 87 Xinkai Rd, Dalian, Liaoning, China. 116011
Website Address: <http://www.fuchangchem.com>
Code: 116011
E-mail: info@fuchangchem.com/louisa0907@126.com
Telephone/Fax: 0411-8360-7405
Technical manual coding: 002024
Effective date: May 1, 2017

2. Composition/Information On Ingredients

Pure product **Mixture**
Commercial product name: fumed silica Fusil 135 **Chemical formula:** SiO₂
Harmful substances composition: No **Content (%):** ≥99.8%
CAS No.: 112945-52-5 7631-86-9 **Molecular weight :** 60.09
Main Application: Applied to the field of silicone rubber, resins, painting, adhesives, sealants, high temperature plastic polymer industry.

3. An overview of the risk

Risk category:
Invasion way: Inhalation. Ingestion. Skin / Eye contact
Health Hazards:
Inhalation: Inhalation of silica dust, the major hazards on the body is caused by silicosis. At present, no specific therapy of silicosis, the key is the dust;
Skin contact: no obvious characteristics;
Eye contact: pollution eyes;
Ingestion: Slightly irritating to the stomach , and some people does not respond;
Environmental Hazards: No Data
Explosion Hazard: This product can't burn

4. Emergency measures

Skin contact:
1. Remove contaminated clothing, rinse with running water.
2. Eases the flow of water and soapy water, rinse the affected area, and continued

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about 15 to 20 minutes.

3. If it has continued to stimulate the induction for medical treatment.

Eye contact:

1. Avoid patients to rub your eyes or eyes closed;
2. Contact lenses must be removed or water rusher out;
3. Carefully turn the injured upper and lower eyelids with warm water to flush contaminated eyes more than 15~20 minutes .After washing, there is still excitement, and then repeatedly washed;
4. Covering his eyes with gauze and Immediate medical examination and treatment.

Inhalation:

1. Before the ambulance to do their own protective measures to ensure their own Safety, Take the sources of pollution or the patient to fresh air.
2. Loosening the shackles of clothing and keep the airway open.
3. If breathing is difficult, oxygen supply.
4. If breathing has stopped, first aid training should be given artificial respiration.
5. If the cardiac arrest immediately subjected to cardiopulmonary rehabilitation surgery (CPR), give oxygen.
6. Attention to the body insulation, and to stabilize the injured mood, immediately seek medical.

Ingestion:

1. If Consciousness of the patient is clear, immediately drink some warm water to induce vomit;
- 2.If the patient is about to lose consciousness or convulsions, do not feed anything by mouth;
- 3.If Patients occur spontaneous vomit, allowed to lean forward to reduce the risk of ingestion;
- 4.Immediate medical examination and treatment.

The doctor guidelines : No Data

5.Fire-fighting measures

hazardous characteristics: Can react violently and ClF_3 , MnF_3 , F_2O_3 .

Hazardous combustion products: Natural products of decomposition is unknown

Firefighting methods: 1.This product can't burn;

6.ACCIDENTAL RELEASE MEASURES

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Emergency treatment:

1. All personnel should follow instructions to evacuate to designated safe areas in the spill area;
2. Assigned need to enter the spill area, wear personal protective equipment in accordance with the demand for personal protective equipment, wear should carry out the necessary checks before entering, and confirmed by the rescue team leader;
3. Do not direct contact with the spill;
4. When a small amount of leak, should be carefully sweeping, avoid dust, bag placed transfer to a safe place; large number of leak, collect the recycled or sent to waste disposal sites;

Environmental Considerations:

Scrub the contaminated area with water and diluted sewage shall be discharged into the waste water system for processing, to avoid entry into sewers, storm drains or other confined space, pollute the environment;

7. Handling and storage

Handling Precautions:

1. When carrying, wear personal protective equipment (the PPE), do not use the drag, pull, roll, kick, etc.;
2. Do not directly related to physical contact;
3. Prepare emergency response equipment can be ready to deal with leaks;
4. Need to have the label containers tightly closed when not in use, should be tightly covered container or empty barrels;

Storage note:

1. Special precautions for storage;
2. Stored in well-ventilated, secure, and avoid the sun and rain;
3. Storage areas only allow workers to access and set the emergency exit, Stored in labeled containers, prevention of confusion with other chemicals;
4. Do all kinds of anti-static measures;

8. Contact controls / personal protection

Maximum allowable concentration: IDLH: 3000 mg/m³

Contact limit

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Name	China MAC	USA TLV-TWA	Former Soviet MAC	USA TLV-STEL
Silica, amorphous	1 mg/m ³	0.05 mg/m ³	1 mg/m ³	No Standards

Monitoring methods: The pyrophosphate Quality method

Engineering controls: Closed operation , local exhaust ventilation , preferably wet operation.

Respiratory protection: Workers in their daily work with a dust mask. Concentration of dust carried in accordance with standard safety facilities;

NIOSH Standard:

- (1) 30 mg/m³ Dust-proof anti- smoke respirator;
- (2) 60 mg/m³ Dust outside the masks disgust respirators , supplied-air respirator;
- (3) 150 mg/m³ Continuous air-supplied respirator, power driver with a dust filter layer air purifying respirator;
- (4) 300 mg/m³ Efficient filter layer anti- particles with full face respirator, continuous air supply respirator mask close to the face;
- (5) 3000 mg/m³ Supply positive pressure full face mask mechanical ventilation
Emergency or planned entry into unknown concentrations region, or in the immediate life-threatening or health status: self-contained positive pressure full face mask respirator, comprehensive supply positive pressure respirator with auxiliary self-contained positive pressure breathing apparatus;
- (6) Escape: Efficient filter layer of a comprehensive anti- particulate respirator, self-contained escape respirator;

Eye Protection: Use of safety masks

Physical protection: Wear overalls and work shoes;

Hand Protection: Generally do not need special protection , if necessary, with protective gloves;

Other protective: —

9. Physical and chemical properties

Appearance and character: White fluffy powder

Suspension (4%) pH value: 5.5~7.5

Melting point (°C) : 1750 °C

Proportion: 2.319~2.653

Specific surface area: 100~400 m²/g

Primary particle size: 7~40nm

Apparent density: ≤50g/L

Saturated vapor pressure (kPa) :-

Heat of combustion (kJ/mol) : —

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Critical temperature (°C) :—	Critical pressure (MPa) : —
Flash point: -	Ignition temperature: -
Upper explosive limit% (V/V) : -	Lower explosive limit% (V/V) : -
Solubility: Insoluble in water, soluble in caustic potash (sodium) and hydrofluoric acid, when heated;	
Other physical and chemical properties: —	

10. Stability and reactivity

Stability: Stable under normal circumstances
Materials to avoid: ClF ₃ , MnF ₃ , F ₂ O ₃
Avoid contact with conditions: Contact may react violently.
Hazardous Polymerization: No Data
Decomposition products: No Data

11. Toxicological information

Acute toxicity:
LD50: No Data
LC50: No Data
Subacute and chronic toxicity: —
Irritating: -
Sensitization: -
Mutagenicity: —
Teratogenicity: —
carcinogenicity: —

12. Ecological Information

Eco toxicity: No Data
Biodegradability: No Data
Bio concentration or bioaccumulation: No Data
Non-biodegradable: No Data
Other harmful effects: —

13. Waste disposal

Waste characteristics:
<input type="checkbox"/> Hazardous waste <input checked="" type="checkbox"/> Industrial solid waste
Waste Disposal Method:

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1. Refer to the relevant laws and regulations;
2. Storage of waste to be processed in accordance with the storage conditions;
3. Take specific incineration or health and safety landfill method;

Waste Note: No Data

14. Transport information

Dangerous Goods Code: No Data

Packaging and marking: Bags shall be accompanied by a lasting, clear signage, product name, batch number, grade, net weight, trademarks, product name, the address of manufacturing plant, production date and the standard flag.

Packing Group: No Data

Packaging methods: No Data

Transport considerations: Packaging should be complete in the time of shipment, loading should be reliable. During transport to ensure that the container does not leak, not collapse, not fall, not damage. It is strictly prohibited to mix with the Halide. The product should prevent insolate, prevent the rain, the high temperature in Transit.

15. Regulatory Information

1. Regulatory Information:

- 1) Domestic chemical safety regulatory information;
- 2) Hazardous Chemical Safety Management Regulations;
- 3) Detailed rules for the implementation of the safety management of chemical dangerous goods Ordinance;
- 4) Workplace safety use chemicals rules ([1996] Ministry of Labor No. 423) and other regulations;
- 5) The relevant provisions of the safe use of hazardous chemicals, production, storage, transportation, loading and unloading;

2. International laws and regulations: —

16. Other Information

References: ——

Filling time: May, 2017

Guidance departments R & D department **Tabulator** **Telephone**

Data audit unit: