

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture

1.1. Product identifier

Product Form : Powder
Product Name : Hydrophobic Silica Aerogel powder
IUPAC name : Amorphous silica

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Industrial use
Use of substance/mixture : Thermal insulation

1.2.2. Uses advised against

No data available

SECTION 2: Hazards

Adverse physicochemical, human health and environmental effects : Dust formation. Risk of dust explosion.

Other hazards : The study does not need to be conducted because the substance is inorganic.

SECTION 3: Composition/information on ingredients

3.1. Substances

Comments : Amorphous silica (respirable dust <1%)

Substance name	Product identifier	%
Hydrophobic Silicon Dioxide, Amorphous	(CAS-No.) 7631-86-9	100

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person or a person with

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	cramps. In case of doubt or persistent symptoms, always consult a physician. Show this safety data sheet to the doctor in attendance. Treat symptomatically.
Inhalation	: Remove person to fresh air and keep comfortable for breathing. In case of doubt or persistent symptoms, always consult a physician.
Skin contact	: Take off contaminated clothing. Gently wash with plenty of soap and water. In case of doubt or persistent symptoms, always consult a physician.
Eyes contact	: Rinse immediately carefully and thoroughly with eyebath or water. In case of doubt or persistent symptoms, always consult a physician.
Ingestion	: Rinse mouth thoroughly with water. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	: The following symptoms may occur: Inhalation of dust may cause irritation of the respiratory system.
Skin contact	: The following symptoms may occur: Contact with dust may cause mechanical irritation or drying of the skin.
Eyes contact	: The following symptoms may occur: Dust may cause painful eye irritation and tearing.
Ingestion	: The following symptoms may occur: May cause gastrointestinal irritation, nausea, vomiting and diarrhea.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: carbon dioxide (CO ₂), powder, alcohol-resistant foam, water spray.
Unsuitable extinguishing media	: Strong water jet.

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5.2. Special hazards arising from the substance or mixture

Specific hazards : Not flammable. Risk of dust explosion.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment, and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel : Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Do not breathe dust. Avoid contact with skin, eyes and clothing. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. Ensure equipment is adequately earthed. Use explosion-proof equipment. Use only non-sparking tools.

6.1.2. For emergency responders

For emergency responders : Ensure procedures and training for emergency decontamination and disposal are in place.

6.2. Environmental precautions

Do not allow to enter surface water or drains. Notify authorities if product enters sewers or public waters

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Do not breathe dust. Avoid contact with skin, eyes and clothing. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Avoid dust formation. Keep away from heat, hot surfaces,

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sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Do not eat, drink, or smoke when using this product. Keep away

from food, drink, and animal feeding stuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Avoid dust formation.

Storage conditions : Store in a dry, cool, and well-ventilated place.

Incompatible substances or mixtures : Hydrogen fluoride.

Incompatible materials : Keep away from strong acids, strong bases, and oxidizing agents.

Storage area : Keep as dry as reasonably practicable.

Packaging materials : Keep only in the original container

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional information : Personal air monitoring: Room air monitoring. Recommended monitoring procedures

8.2. Exposure controls

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Engineering measure(s)	: Provide adequate ventilation. Organisational measures to prevent /limit releases, dispersion, and exposure. Safe handling: see section 7. Apply measures to prevent dust explosions. Ensure equipment is adequately earthed.
Personal protective equipment	: The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hand protection	: Wear chemically resistant gloves (tested to EN374). Suitable material: neoprene gloves, Latex gloves, rubber or plastic gloves, leather gloves, neoprene gloves (>0.3mm, BTT: 8h). The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.
Eye protection	: Use suitable eye protection. (EN166): Safety glasses with side shields
Body protection	: Wear suitable protective clothing
Respiratory protection	: Not required for normal conditions of use. In case of insufficient ventilation, wear suitable respiratory equipment. Effective dust mask (EN 149). Half-face mask (EN 140). full face mask (DIN EN 136). Filter type: P (EN 143)
Thermal hazard protection	: Not required for normal conditions of use. Use dedicated equipment.
Environmental exposure controls	: Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder
Colour	: white

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Odour	: odorless.
Odor threshold	: Not applicable
pH	: Not applicable
Relative evaporation rate	: No data available
Melting / freezing point	: No data available
Freezing point	: No data available
Initial boiling point and boiling range	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: 350 °C
Flammability (solid, gas)	: Not flammable, not combustible, not self-igniting
Vapour pressure	: Not applicable
Vapour density	: Not applicable
Relative density	: Not applicable
Solubility	: Water: Insoluble
Partition coefficient n-octanol/water	: No data available
Kinematic viscosity	: No data available
Dynamic viscosity	: No data available
Explosive properties	: Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
Oxidising properties	: Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidizing properties.
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

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Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Safe handling: see section 7.

10.5. Incompatible materials

Safe handling: see section 7.

10.6. Hazardous decomposition products

Reference to other sections: 5.2.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified (Based on available data, the classification criteria are not met.)
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.) pH: Not applicable
Respiratory or skin sensitization	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)

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STOT-repeated exposure : Not classified (Based on available data, the classification criteria are not met.)

Aspiration hazard : Not classified (Based on available data, the classification criteria are not met.)

Other information : Symptoms related to the physical, chemical and toxicological characteristics. For further information see section 4.

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties : According to the criteria of the Indian Chemical Regulation, the substance/the product has not to be labelled as "dangerous for the environment".

12.2. Persistence and degradability

The study does not need to be conducted because the substance is inorganic

12.3. Bioaccumulative potential

There is no bioaccumulation.

12.4. Mobility in soil

No data available

12.5. Results of PBT

No data available

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. Safe handling: see section 7. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste

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disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
		14.1. UN number		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
		14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
		14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
		14.4. Packing group		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
		14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
No supplementary information available				

14.6. Special precautions for user

Special precautions for user : No data available

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

- Inland waterway transport

Not applicable

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- Rail transport

Not applicable

SECTION 15: Regulatory information

15.1. Safety, health, and environmental regulations/legislation specific for the substance or mixture

The substance is not listed

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out

SECTION 16: Other information

Nil