

SAFETY DATA SHEET

SPECIAL GLASS FIBER

Silica-rich, woven, non-adhesive special glass fiber tape

This Safety Data Sheet is prepared in the format of Annex II to REACH (EC) No 1907/2006 as amended by Regulation (EU) 2020/878. The product is supplied as a solid woven textile tape.

SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	Special Glass Fiber
Commercial designation	Quartz fiber tape / silica-rich special glass fiber
Product form	Woven tape; no adhesive backing
1.2 Relevant identified uses	Heat protection and thermal wrapping of suitable components
Uses advised against	No specific uses advised against are known; do not use outside verified service conditions
1.3 Supplier	Tianjin Tuolin Technology Co., Ltd.
Address	No. 160-4-1601, Zhangzizhong Road, Xiaobailou Street, Heping District, Tianjin City, China
Telephone	0086-18522616683
Email	tuolin@tuolintech.com
1.4 Emergency telephone	0086-18522616683

SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification according to Regulation (EC) No 1272/2008 (CLP)

The product is not classified as hazardous according to the CLP Regulation based on the supplied information and the solid glass-fiber matrix form.

2.2 Label elements

Hazard pictogram(s)	Not applicable
Signal word	Not applicable
Hazard statements	Not applicable
Precautionary statements	Handle in accordance with good industrial hygiene and safety practice. Avoid generating and inhaling dust or fibers.

2.3 Other hazards

Cutting, tearing or handling may produce coarse fibers or dust that can cause temporary mechanical irritation to the skin, eyes or respiratory tract. No PBT/vPvB assessment has been carried out for the finished product from the supplied data. No endocrine-disrupting properties are identified in the supplied source SDS.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance / 3.2 Mixture

The product is a solid woven special glass fiber tape. The following formulation is supplied for the product fiber composition. Components are embedded in the glass-fiber matrix; the finished product is not classified as hazardous based on the supplied information.

Component	Formula	CAS No.	EC No.	Concentration
Silicon dioxide (glass-matrix constituent)	SiO ₂	7631-86-9	231-545-4	61.58%
Calcium oxide	CaO	1305-78-8	215-138-9	20.63%
Aluminium oxide	Al ₂ O ₃	1344-28-1	215-691-6	5.17%

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Component	Formula	CAS No.	EC No.	Concentration
Boron oxide	B ₂ O ₃	1303-86-2	215-125-8	11.71%
Magnesium oxide	MgO	1309-48-4	215-171-9	0.33%
Sodium oxide	Na ₂ O	1313-59-3	215-208-9	0.33%
Iron oxide	Fe ₂ O ₃	1309-37-1	215-168-2	0.25%

Note: The component identifiers above are reference identifiers for the stated oxide composition. Verify the final formulation and identifiers against the controlled supplier formulation record before regulatory submission.

SECTION 4 FIRST AID MEASURES

General advice	No special measures are normally required. Remove the exposed person from the source of dust or fibers.
Skin contact	Rinse with lukewarm, gently flowing water. Do not rub. Obtain medical attention if irritation persists.
Eye contact	Rinse cautiously with clean water for several minutes. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists.
Inhalation	Move to fresh air. Keep at rest. Obtain medical attention if coughing, breathing discomfort or other symptoms persist.
Ingestion	Rinse mouth. Do not induce vomiting. Seek medical advice if unwell.
Most important symptoms	Temporary mechanical irritation, itching, redness, coughing or discomfort caused by fibers or dust.
Immediate medical attention	Treat symptomatically. No specific antidote is known from the supplied data.

SECTION 5 FIREFIGHTING MEASURES

5.1 Extinguishing media

Use extinguishing media appropriate for the surrounding fire: water spray, dry chemical, carbon dioxide or foam. The product itself is an inorganic woven textile and does not readily support combustion.

5.2 Special hazards arising from the substance or mixture

Heating in a fire may generate irritating fumes from any residual sizing or finish. Thermal decomposition products may include carbon oxides and other irritating smoke components depending on the surrounding materials.

5.3 Advice for firefighters

Wear self-contained breathing apparatus and full protective equipment for the surrounding fire. Approach from upwind where possible. Prevent contaminated firefighting water from entering drains or surface water.

SECTION 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

The product is a solid tape and is not expected to spill as a liquid. Avoid unnecessary handling and avoid generating dust or airborne fibers. Wear suitable gloves and eye protection when cutting or collecting damaged material. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent large quantities of fibers, dust or waste from entering drains, surface water or soil. Collect waste for appropriate disposal.

6.3 Methods and material for containment and cleaning up

Collect pieces mechanically. Use a suitable vacuum with filtration or damp cleaning where appropriate. Avoid dry sweeping if it could disperse dust. Place collected material in a suitable waste container.

6.4 Reference to other sections

See Section 8 for personal protective equipment and Section 13 for disposal considerations.

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SECTION 7 HANDLING AND STORAGE

7.1 Precautions for safe handling

- Handle in accordance with good industrial hygiene and safety practice.
- Avoid unnecessary cutting, tearing or abrasion that may generate dust or airborne fibers.
- Ensure adequate ventilation at the workplace. Avoid contact with eyes and prolonged direct skin contact.
- Use suitable gloves and eye protection when cutting, trimming or installing. Do not eat, drink or smoke during handling.

7.2 Conditions for safe storage, including any incompatibilities

Keep in the original packaging or a closed clean container in a dry, cool and well-ventilated place. Protect from moisture, contamination and physical damage. Store away from strong oxidizing agents and strong alkaline substances. Avoid uncontrolled heating and direct flame.

7.3 Specific end use(s)

Heat protection and thermal wrapping of suitable components, including verified automotive and industrial applications. Product selection must be based on the actual temperature, cycling, vibration and installation conditions.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

The supplied source SDS does not establish an occupational exposure limit for the finished tape. Apply current local occupational exposure limits for nuisance dust, respirable dust and relevant constituents. The following reference values are reproduced from the supplied source SDS and are not a substitute for local legal requirements:

Substance	ACGIH TLV	OSHA PEL	NIOSH IDLH
Aluminium oxide	N/A	15 mg/m3 total; 5 mg/m3 respirable	N/A
Calcium oxide	TWA 2 mg/m3	TWA 5 mg/m3 total	25 mg/m3
Magnesium oxide	10 mg/m3 (I)	TWA 15 mg/m3 total	750 mg/m3
Boron oxide	N/A	TWA 15 mg/m3 total	2000 mg/m3

8.2 Exposure controls

Engineering controls	Provide adequate general ventilation. Use local exhaust ventilation where cutting or processing generates dust or fibers. Provide eyewash facilities where appropriate.
Respiratory protection	Normally not required for intact product. If dust or airborne fibers are generated or exposure limits may be exceeded, use a suitable particulate respirator selected under local rules.
Hand protection	Wear protective work gloves suitable for mechanical handling and fiber protection.
Eye/face protection	Wear safety glasses or goggles when cutting, trimming or installing.
Skin/body protection	Wear suitable protective clothing. Avoid rubbing fibers into the skin. Wash hands after handling.
Environmental exposure controls	Avoid uncontrolled release of dust, fibers or waste to drains and surface water.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid woven tape
Colour	Natural white
Odour	Odourless or slight characteristic odour
pH	No data available / not applicable for insoluble solid
Melting/freezing point	No data available
Flammability	Does not readily support combustion; no classification assigned
Flash point	Not applicable

Solubility in water	Insoluble
Relative density	No data available
Explosive/oxidising properties	Not expected based on the supplied product form

SECTION 10 STABILITY AND REACTIVITY

10.1 Reactivity	No hazardous reactivity is expected when used as specified.
10.2 Chemical stability	Stable under recommended storage and handling conditions.
10.3 Possibility of hazardous reactions	No dangerous reactions known under normal conditions of use.
10.4 Conditions to avoid	Uncontrolled overheating, direct flame beyond the intended service condition, moisture contamination and excessive dust generation.
10.5 Incompatible materials	Strong oxidizing agents and strong alkaline substances.
10.6 Hazardous decomposition products	Irritating fumes and carbon oxides may be generated from residual sizing or surrounding materials during a fire or severe overheating.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Hazard class	Assessment for finished product
Acute toxicity	No data available; classification criteria are not met based on supplied information.
Skin corrosion/irritation	Classification criteria are not met. Mechanical irritation may occur during handling.
Serious eye damage/irritation	Classification criteria are not met. Dust or fibers may cause temporary mechanical irritation.
Respiratory or skin sensitisation	No evidence supplied for classification of the finished product.
Mutagenicity, carcinogenicity, reproductive toxicity	No evidence supplied for classification of the finished product.
STOT single/repeated exposure	No data available; classification criteria are not met based on supplied information.
Aspiration hazard	Not applicable to the solid woven tape form.

11.2 Information on other hazards

Mechanical irritation is the principal foreseeable effect during cutting, abrasion or installation. Avoid inhalation of dust or airborne fibers.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity	No data available for the finished product. No environmental classification is assigned based on the supplied information.
12.2 Persistence and degradability	The inorganic glass-fiber matrix is not expected to biodegrade. No further data available.
12.3 Bioaccumulative potential	No data available; not expected to be relevant for the solid glass-fiber matrix.
12.4 Mobility in soil	The solid product is not expected to be mobile. Avoid release of fibers or waste to soil and water.
12.5 PBT/vPvB assessment	No assessment has been carried out from the supplied data.
12.6 Endocrine disrupting properties	No evidence identified in the supplied source SDS.
12.7 Other adverse effects	No further relevant information available.

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SECTION 13 DISPOSAL CONSIDERATIONS

Product	Dispose of surplus or non-recyclable material through a licensed waste contractor in accordance with regional, national and local requirements.
Contaminated packaging	Dispose of as unused product unless contamination requires different treatment.
Waste code	No specific waste code is assigned in this SDS. The final code must be determined by the user or waste contractor according to the actual waste stream and local law.
Additional advice	Do not discharge fibers, dust or waste to drains, surface water or soil.

SECTION 14 TRANSPORT INFORMATION

Transport mode	Status
ADR/RID (road/rail)	Not regulated as dangerous goods
IMDG (sea)	Not regulated as dangerous goods
ICAO-IATA (air)	Not regulated as dangerous goods
UN number	Not assigned / not applicable
UN proper shipping name	Not applicable
Transport hazard class	Not applicable
Packing group	Not applicable
Marine pollutant	No information indicating classification as a marine pollutant
Special precautions	Protect packages from moisture and physical damage; see Sections 7 and 8.

SECTION 15 REGULATORY INFORMATION

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

This document is structured to follow Annex II of REACH (EC) No 1907/2006 as amended by Regulation (EU) 2020/878. Based on the supplied information, the finished product is not classified as hazardous under Regulation (EC) No 1272/2008 (CLP). Current EU, national and customer-specific inventory, worker-protection and waste requirements must be verified before placing the product on a specific market.

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the finished product in the supplied source information.

SECTION 16 OTHER INFORMATION

16.1 Abbreviations

Abbreviation	Meaning
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
CLP	Classification, Labelling and Packaging Regulation (EC) No 1272/2008
EC	European Community number
IATA / ICAO	International Air Transport Association / International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
PBT / vPvB	Persistent, Bioaccumulative and Toxic / very Persistent and very Bioaccumulative
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
TWA	Time-weighted average

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16.2 Preparation and revision information

SDS version	1.0
Issue date	2026-09-03
Prepared for	Tianjin Tuolin Technology Co., Ltd.
Source basis	Supplier-provided EU SDS for fiberglass textiles, issue date 2023-05-24, plus the product composition supplied by the customer for Special Glass Fiber.

16.3 Disclaimer

The information in this SDS is based on the supplier-provided source document and the formulation information supplied for this product. It is intended as guidance for safe handling, storage, use, transportation and disposal. It is not a warranty or product specification and does not replace a competent regulatory review. The information may not be valid when the product is used with other materials or in processes not described here. The user remains responsible for determining suitability, exposure controls and compliance with applicable laws before placing the product on the market or using it in a specific application.

IMPORTANT: Confirm the final controlled formulation, CAS/EC identifiers, classification and market-specific regulatory status with a qualified SDS professional before issuing this document as the official customer SDS.