Report No.: 111192018516D

# SDS Report

Sample Description

GBF Basalt Fiber Insulation Board

Applicant

Zhejiang GBF Basalt Fiber Co., Ltd.

Pony Testing International Group www.ponytest.com

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## Safety Data Sheet (SDS)

according to 29CFR 1910.1200 (g)ANSI Z400.1Z129.1-2010

GBF Basalt Fiber Insulation Board

## Section 1 - Chemical Product and Company Identification

Sample Name: GBF Basalt Fiber Insulation Board Sample Code: N/A Recommended Uses: Fire protection, thermal insulation. Restrictions on use: N/A Export to: America, EU, etc. Company I dentification: Zhejiang GBF Basalt Fiber Co., Ltd. Address: Hengdian Electronic Industry Park, Dongyang City, Zhejiang Province, China. TEL: +86 579-86312028 Fax: +86 579-86563108 Post Code: 322118 E-mail: gbf@chinagbf.com Emergency Telephone: +86 579-86312028

## Section 2 - Hazards Identification

2.1 Emergency Overview:

Appearance/Odor: Brown slablike solid, characteristic odor.

The product is not combustible under normal storage and handling conditions. If contacted or inhaled the dust of the product may cause eyes, skin and respiratory tract irritation.

2.2 OSHA Regulatory Status: This product is considered hazardous by the OSHA hazard communication standard (29 CFR 1910.1200).

pictogram		A
Signal word	Danger	

Report ID: 11119	
Hazard Statement(s)	H302 Harmful if swallowed H312 Harmful in contact with skin H314 Causes severe skin burns and eye damage H318 Causes serious eye damage H335 May cause respiratory irritation
Streport stall prevail	<ul> <li>P260 Do not breathe dusts or mists.</li> <li><i>- if inhalable particles of dusts or mists may occur during use.</i></li> <li>P264 Wash [Manufacturer/supplier or the competent authority to specify parts of the body to be washed after handling. ] thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/protective clothing.</li> <li>P301 + P312 IF SWALLOWED: Call a POI SON CENTER/ doctor if you feel unwell.</li> <li>P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</li> <li>P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.</li> <li>P302 + P352 IF ON SKIN: Wash with plenty of water or</li> </ul>
Precautionary statement(s)	<ul> <li>[Manufacturer/supplier or the competent authority may specify a cleansing agent if appropriate, or may recommend an alternative agent in exceptional cases if water is clearly inappropriate. ]</li> <li>P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P321 Specific treatment [Reference to supplemental first aid instruction. ]</li> <li>P330 Rinse mouth.</li> <li>P362 + P364 Take off contaminated clothing and wash it before reuse.</li> <li>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 Store locked up.</li> </ul>

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P501 Dispose of contents / container in accordance with local / regional / national / international regulations (to be specified).

- 2.3 Potential Health Hazards: Relevant routes of exposure: See Section 11 for more information. Medical condition aggravated by exposure: N/A.
- 2.4 Potential Environmental Hazards: N/A.
- 2.5 Carcinogenicity: See Section 11.

Section 3 - Composition, Information on Ingredients

General Chemical Description: This chemical product is a substance. Composition, Information on Ingredients:

Chemi	cal Name	CAS No.	% (weight)	EC#	Classification
100	Silicon dioxide	7631-86-9	46.4-53.4	231-545-4	Not Classified
13	Aluminium oxide	1344-28-1	13.1-16.5	215-691-6	Not Classified
	Siiron trioxide	1309-37-1	0.4.40.4	215-168-2	Not Classified
×	+ Iron oxide	1345-25-1	8.1-12.6	N/A	Not Classified
Basalt Fiber	Calcium oxide	1305-78-8	5.3-8.5	215-138-9	Skin Irrit. 2 H315 Eye Dam. 1 H318 STOT SE 3 H335
	Disodium oxide +Dipotassium	1313-59-3	3.2-4.7	215-208-9	Skin Corr. 1B H314
	oxide	12136-45-7		235-227-6	Not Classified
	Magnesium oxide	1309-48-4	2.7-4.8	215-171-9	Not Classified
Ä	titanium dioxide	13463-67-7	0.7-2.0	236-675-5	Not Classified

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Formaldehyde, oligomeric reaction products with phenol	9003-35-4	5.0-15.0	500-005-2	Acute Tox. 4 H302 Acute Tox. 4 H312
Impurity	N/A	<0.2	N/A	Not Classified
<u> </u>	(4)~			0

#### Section 4 - First Aid Measures

4.1 First aid procedures by route of exposure:

- Inhalation: No hazardous under normal conditions. If inhaled, remove to fresh air immediately. If breathing is difficult, given oxygen by trained professionals. If not breathing, give artificial respiration. Inhalation of the powder may cause metal fume fever. The symptoms of metal fume fever do not become manifest until several hours. Get medical aid if cough, headache, shortness of breath, sore throat or other symptoms appear.
- Skin: No hazardous under normal conditions. If skin irritation occur, remove contaminated clothing and shoes immediately and flush skin with plenty of water and soap. Get medical aid immediately if symptoms occur.
- Eyes: No hazardous under normal conditions. In case of contact, rinse immediately with plenty of water for at least 15-30 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easily possible. DO NOT rubbing eyes with hand. Get medical aid immediately.
- Ingestion: Ingestion of this material is unlikely. If swallowed, rinse mouth with water. Get medical aid immediately if irritation or other symptoms occur.
- 4.2 Most important acute and delayed symptoms/effects: See Section 11 for more information.
- 4.3 Antidotes: N/A.
- 4.4 Note to Physicians: Treat symptomatically and supportively.

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## Section 5 - Fire Fighting Measures

5.1 Flammable properties: The product is not combustible.

5.2 Extinguishing Media:

Suitable extinguishing Media: Suitable extinguishing Media: Use appropriate extinguishing media in case of fire. Such as powder, water spray, foam, carbon dioxide and dry sand.

Unsuitable extinguishing media: N/A.

- 5.3 Protection of firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
- 5.4 Specific hazards arising from the chemical: The product is not combustible.
- 5.5 Protective equipment and precautions for firefighters: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Move containers from fire area if this can be done without risk. Prevent run off from fire control dilution from entering streams or drinking water supply.

## Section 6 - Accidental Release Measures

- 6.1 Personal Precautions: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Use proper personal protective equipment as indicated in Section 8.
- 6.2 Environmental Precautions: Evacuate and ventilate spill area. Stop leak if safe to do so. Move containers from spill area. Isolate hazard area. Do not touch or walk through spilled material. Do not get water inside containers. Avoid breathing vapor and fume. Remove all sources of ignition or heat. Review Section 5 and Section 7 sections before proceeding with clean-up.

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- 6.3 Methods for Containment: Stop leak if safe to do so. Move containers from spilled area.
- 6.4 Methods for Clean-Up: Remove all sources of ignition. Ensure adequate ventilation. Avoid generating dust. Carefully shovel or sweep up the product and place in suitable container for disposal according to local regulations.
- 6.5 Other Information: N/A
- 6.6 Spill or leak statements by type of chemical: Use appropriate personal protective equipment(PPE).

## Section 7 - Handling and Storage

- General Information: This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- 7.1 Storage: Ensure good local exhaust ventilation. Handle and open container with care. Keep container tightly closed and away from incompatible substances (see section 10), any sources of ignition or heat (e.g. open flames, sparks, direct sunlight, smoking, hot surfaces), foodstuffs, beverages and foods. Avoid contact with eyes, skin and clothing and shoes. Wash clothing and shoes thoroughly before reuse. Avoid breathing dust. Empty containers retain product residue. The work area should be equipped with the corresponding species and quantity of fire-fighting equipments and emergency equipments.
- 7.2 Handling: Keep container securely sealed when not in use. Store in a cool, dry, well-ventilated area away from incompatible substances (see section 10), any sources of ignition or heat (e.g. open flames, hot surfaces), feedstuffs, beverages and foods. Prevent dispersion of dust! Avoid physical damage to containers. The storage area should be equipped with the corresponding species and quantity of emergency equipment, spills emergency treatment equipment and appropriate storage material.

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## Section 8 - Exposure Controls, Personal Protection

#### 8.1 Exposure Limit:

CAS No.	ACGIH (mg/m <sup>3</sup> )	NIOSH (mg/m <sup>3</sup> )	OSHA (mg/m³)
7631-86-9	N/A	N/A	N/A
1344-28-1	TLV- TWA 10	N/A	PEL-TWA 15 (total) PEL-TWA 5 (resp)
1309-37-1	TLV- TWA 5 (as Fe)	N/A	PEL-TWA 15 (total) PEL-TWA 5 (resp)
1345-25-1	N/A	N/A	N/A
9003-35-4	N/A	N/A	N/A
1305-78-8	TLV- TWA 2	REL-TWA 2 IDLH-25	PEL-TWA 5
1313-59-3	N/A	N/A	N/A
12136-45-7	N/A	N/A	N/A
1309-48-4	TLV- TWA 10 (Inhalable fraction)	IDLH-750	PEL-TWA 15
13463-67-7	TLV- TWA 10	IDLH-Ca 5000	PEL-TWA 15

8.2 Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Equipped with safety shower and eyes bath. Keep away from heat and fire.

8.3 Personal Protective Equipment:

Respiratory Protection: No special requirement under normal conditions. It is recommended to wear appropriate protective respiratory masks. A full face positive pressure supplied-air respirator or a self contained breathing apparatus should be used when there is the risk of greater exposure.

Hand Protection: Wear appropriate protective gloves to reduce the contact.

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Eyes Protection: Wear appropriate safety spectacles.

Skin and Body Protection: Wear appropriate protective clothing to prevent skin exposure.

8.4 General hygiene considerations: To maintain good health habits. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

## Section 9 - Physical and Chemical Properties

Appearance: Brown slablike solid. Odor: Light odor. Odor threshold: N/A Physical state: N/A pH: N/A \*Melting Point: >1450℃ Initial Boiling Point and Boiling range: N/A Flash Point: N/A **Relative Density: N/A** Evaporation rate: N/A Upper/lower flammability or explosive limits: N/A Vapor Pressure: N/A Vapor Density (Air=1): N/A \*Density: (100-400) kg/m<sup>3</sup> Relative density: N/A \*Solubility: Insoluble in water. Auto-ignition Temperature: N/A Decomposition temperature: N/A \*Flammability: Not combustible. Note: The symbol '\*' means the data is applied by Applicant.

Section 10 - Stability and Reactivity

10.1 Reactivity: No reactivity under normal storage and handling conditions.

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- 10.2 Possibility of hazardous reactions: The components of the product may decompose on heating producing toxic and irritating fumes.
- 10.3 Chemical Stability: Stable under normal storage and handling conditions.
- 10.4 Conditions to Avoid: Incompatible materials, any sources of ignition or heat (e.g. open flames), dust generation.
- 10.5 Incompatibilities Materials: Strong acids, strong oxidants, strong bases, etc.

10.6 Hazardous Decomposition Products: No information found.

## Section 11 - Toxicological Information

#### 11.1 Toxicological information:

CAS No.	RTECS#	LD50/LC50
7631-86-9	VV7310000	No data available.
1344-28-1	BD1200000	No data available.
1309-37-1	NO7400000	No data available.
1345-25-1	N/A	No data available.
9003-35-4	N/A	No data available.
1305-78-8	EW3100000	No data available.
1313-59-3	N/A	No data available.
12136-45-7	N/A	No data available.
1309-48-4	OM3850000	No data available.
13463-67-7	XR2275000	LD50: > 10,000 mg/kg (Oral, rat) LD50: > 10,000 mg/kg (Skin, rabbit)

Medical condition aggravated by exposure: No data available.

11.2 Toxicity Data: No data available.

- 11.3 Repeated dose effects: No data available.
- 11.4 Skin Irritation: No data available.

Eye Irritation:

Composition: CAS# 7631-86-9

Report ID: 111192018516D - Draize test, rabbit, eye: 25 mg/24H Mild

Composition: CAS# 1305-78-8

- Eyes - rabbit - eye irritation Severe

11.5 Respiratory or Skin sensitization: No data available.

11.6 Carcinogenicity:

Composition: CAS# 7631-86-9

- IARC: Group 3-Not classifiable as to carcinogenicity to humans.

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- Not listed as a carcinogen by ACGIH, NTP, or CA Prop 65.
- Composition: CAS# 1344-28-1
  - ACGIH: A4-Not classifiable as a human carcinogen.

- Not listed as a carcinogen by IARC, NTP, or CA Prop 65. Composition: CAS# 1309-37-1

- IARC: Group 3-Not classifiable as to carcinogenicity to humans.

- Not listed as a carcinogen by ACGIH, NTP, or CA Prop 65.

Composition: CAS# 1309-48-4

- ACGIH: A4-Not classifiable as a human carcinogen.

- Not listed as a carcinogen by IARC, NTP, or CA Prop 65. Composition: CAS# 13463-67-7
- ACGIH: A4-Not classifiable as a human carcinogen.
- IARC: Group 2B-Possibly carcinogenic to humans.
- Not listed as a carcinogen by NTP, or CA Prop 65.

Other compositions in this product are not listed as carcinogens by ACGIH,

IARC, NTP, or CA Prop 65.

- 11.7 Neurological effects: No data available.
- 11.8 Reproductive Cell Mutagenicity: No data available.

Reproductive Toxicity: No data available.

11.9 Skin corrosion: No data available.

Eye corrosion: No data available.

- 11.10 Developmental effects: No data available.
- 11.11 Specific target organ toxicity-Single exposure: May cause mechanical irritation.

Specific target organ toxicity-Repeated exposure: Lungs may be affected by repeated or prolonged exposure to dust particles.

11.12 Aspiration hazard: Inhalation of high concentrations of dusts of this product may cause eyes and upper respiratory tract irritation.

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## Section 12 - Ecological Information

12.1 Ecotoxicity:

Composition: CAS# 1305-78-8

- Toxicity to fish:
- LC50 Cyprinus carpio (Carp) 1,070 mg/l 96 h
- 12.2 Persistence/Degradability: No data available.
- 12.3 Bioaccumulation/Accumulation: No data available.
- 12.4 Mobility in environmental media: No data available.
- 12.5 Other adverse effects: No data available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Disposal should be in accordance with applicable regional, national and local laws and regulations.

- The generation of waste should be avoided or minimized wherever possible. Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Refer to Section 7-Handling and Storage and Section 8-Exposure Controls/Personal Protection for additional handling information and protection of employees.

## Section 14 - Transport Information

Not regulated as a hazardous material for transportation. (IATA DGR 55<sup>th</sup>, IMDG Code 36-12 edition, UN TDG Rev.18)

UN: N/A

UN Classification: N/A

UN proper Shipping Name: N/A

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Report ID: 111192018516D Packaging Sign: N/A Packaging group: N/A Marine Pollutant (Y/N): None Transport in bulk according to

Transport in bulk according to MARPOL73/78 Annex II and the IBC Code: N/A

Transport Fashion: By air, by sea, by railway and by road. Packaging information: N/A

Shipping Notice: Packaging is intact and transport is secure. Avoid the physical damage of the packaging. Away from high temperature, open fire and moisture.

## Section 15 - Regulatory Information

Regulatory Information: Reference to the local, national, US, EU, CA and international regulations.

CAS No.	CAS No. TSCA		EINECS/ ELINCS/NLP	DSL/NDSL	
7631-86-9	Listed	Listed	Listed	Listed in DSL	
1344-28-1	Listed	Listed	Listed	Listed in DSL	
1309-37-1	Listed	Listed	Listed	Listed in DSL	
1345-25-1	Listed	Listed	Listed	Listed in DSL	
9003-35-4	Listed	Listed	Listed	Listed in DSL	
1305-78-8	Listed	Listed	Listed	Listed in DSL	
1313-59-3	Listed	Listed	Listed	Listed in DSL	
12136-45-7	Listed	Listed	Listed	Listed in DSL	
1309-48-4	Listed	Listed	Listed	Listed in DSL	
13463-67-7	Listed	Listed	Listed	Listed in DSL	

California Prop.65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

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## Section 16 - Additional Information

Issue Time: 2014-11-27 Issue Department: Technical department Data review unit: / Modification record: / Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. Other Information:

ACGIH: (American Conference of Governmental Industrial Hygienists); CAS: (Chemical Abstracts Service); DSL: (the Domestic Substances List of Canada); EC: (European Commission); BCF: (Bioconcentration Factor); BOD: (Biochemical oxygen demand); EC50: (Median effective concentration); IARC: (International Agency for Research on Cancer); IATA: (International Air Transport Association); ENCS(MITI No.): (Existing and New Chemical Substances of Japan); IECSC: (Inventory of Existing Chemical Substances in China); IMDG: (International Maritime Dangerous Goods); LC50: (Lethal concentration, 50 percent kill); LD50: (Lethal dose, 50 percent kill); NDSL: (the Non-domestic Substances List of Canada); NIOSH: (US National Institute for Occupational Safety and Health); NOEC: (No observed effect concentration); NTP: (US National Toxicology Program); OSHA: (US Occupational Safety and Health); PC-STEL: (Permissible concentration-time weighted average); PC-TWA: (Permissible concentration-short time exposure limit); PEL: (Permissible Exposure Level); REL: (Recommended Exposure Limit); RTECS: (Registry of Toxic Effects of Chemical Substances); STEL: (Short Term Exposure Limit); TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations); TOC: (Total Organic Carbon); TSCA: (Toxic Substances Control Act of USA); TWA: (Time Weighted Average); TLV: (Threshold Limit Value)