



**Safety Data Sheet**  
acc. to OSHA HCS

Printing date 03/16/2015

Version: 4. 1

Reviewed on 03/16/2015

**1 Identification**

- **Product identifier**
- **Trade name: Glaspellets**
- **Relevant identified uses of the substance or mixture and uses advised against** No further relevant information available.
- **Application of the substance / the mixture**  
Manufacturing of:  
glass fibers
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Lauscha Fiber International Corp.  
105 Eastport Lane  
Summerville, SC 29483 (USA)  
Phone: (+1) 843 871 3200  
Fax : (+1) 843 871 8866  
Email : info@LFIfiber.com
- **E-mail competent person:**  
sds@kft.de  
wrodigas@unifrax.com
- **Information department:** QS; Mr. Wolfgang Rodigas Tel.: +49-36702-287-17/-24
- **Emergency telephone number:** Information department

**2 Hazard(s) identification**

- **Classification of the substance or mixture** The product is not classified according to the Globally Harmonized System (GHS).
- **Information concerning particular hazards for human and environment:**  
In solid form this material is not hazardous.  
Splinters may cause cuts.

- **Label elements**
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**  
Health = 1  
Fire = 1  
Reactivity = 0
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

**3 Composition/information on ingredients**

- **Chemical characterization: Mixtures**
  - **Description:**  
Zusammensetzung (ca. in %) C-Glas B-Glas CHB-Glas
- |                                |    |    |    |
|--------------------------------|----|----|----|
| SiO <sub>2</sub>               | 65 | 58 | 61 |
| Na <sub>2</sub> O              | 16 | 10 | 15 |
| K <sub>2</sub> O               | 1  | 2  | 2  |
| CaO                            | 6  | 3  | 7  |
| MgO                            | 3  | 1  | 3  |
| Al <sub>2</sub> O <sub>3</sub> | 3  | 5  | 4  |
| B <sub>2</sub> O <sub>3</sub>  | 5  | 10 | 7  |
| BaO                            |    | 5  |    |



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ZnO 3

**· Dangerous components:**

CAS: 1313-59-3	Sodium oxide (Na <sub>2</sub> O)	10-20%
	C R34	
	R14	
	Skin Corr. 1B, H314;  Eye Dam. 1, H318	
CAS: 1303-86-2	diboron trioxide	5-10%
RTECS: ED 7900000	T R60-61	
	Repr. 1B, H360	
CAS: 1305-78-8	calcium oxide	5-10%
RTECS: EW 3100000	Xi R37/38-41	
	Eye Dam. 1, H318;  Skin Irrit. 2, H315; STOT SE 3, H335	
CAS: 1344-28-1	aluminium oxide	5-10%
RTECS: BD 1200000		
CAS: 1309-48-4	magnesium oxide	1-5%
CAS: 1314-13-2	zinc oxide	1-5%
RTECS: ZH 4810000	N R50/53	
CAS: 12136-45-7	dipotassium oxide	< 2.5%
	Xi R36	
	Skin Corr. 1B, H314;  Eye Irrit. 2A, H319	
CAS: 1304-28-5	barium oxide, obtained by calcining witherite	< 2.5%
RTECS: CQ 9800000	Xn R20/22;  Xi R36/38	
	Acute Tox. 3, H331;  Acute Tox. 4, H302;  Skin Irrit. 2, H315;  Eye Irrit. 2A, H319	

**· SVHC**

1303-86-2 diboron trioxide

**· TSCA**

All components are listed.

**4 First-aid measures**

**· Description of first aid measures**

**· General information:** In case of cuts apply a plaster or dressing.

**· After inhalation:**

In this form unlikely.

If dusts form while handling the material and inhalative exposure occurs:

Supply fresh air and to be sure call for a doctor.

**· After skin contact: -**

**· After eye contact:** Immediate transport to ophthalmologist or ophthalmic clinic.

**· After swallowing:** void

**· Information for doctor:**

**· Most important symptoms and effects, both acute and delayed** No further relevant information available.

**· Indication of any immediate medical attention and special treatment needed** Symptomatic treatment

**5 Fire-fighting measures**

**· Extinguishing media**

**· Suitable extinguishing agents:** Use fire fighting measures that suit the environment.

**· For safety reasons unsuitable extinguishing agents:** No data available

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- **Special hazards arising from the substance or mixture** No specific hazards known.
- **Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

**6 Accidental release measures**

- **Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **Environmental precautions:** No special measures required.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**7 Handling and storage**

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** Observe the general rules of industrial fire protection.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Not required
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**  
Store in dry conditions.  
Protect from humidity and water.
- **Storage class:** 10-13 other combustible and non-combustible substances
- **Specific end use(s)** If the pellets are melted down again, hot glass particles may splinter due to tension within the glass.

**8 Exposure controls/personal protection**

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**

**1303-86-2 diboron trioxide**

PEL Long-term value: 15\* mg/m<sup>3</sup>  
\*total dust

REL Long-term value: 10 mg/m<sup>3</sup>

TLV Long-term value: 10 mg/m<sup>3</sup>

**1305-78-8 calcium oxide**

PEL Long-term value: 5 mg/m<sup>3</sup>

REL Long-term value: 2 mg/m<sup>3</sup>

TLV Long-term value: 2 mg/m<sup>3</sup>

**1344-28-1 aluminium oxide**

PEL Long-term value: 15\*; 15\*\* mg/m<sup>3</sup>  
\*Total dust; \*\* Respirable fraction

REL Long-term value: 10\* 5\*\* mg/m<sup>3</sup>  
as Al\*Total dust\*\*Respirable/pyro powd./welding f.

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TLV Long-term value: 1\* mg/m<sup>3</sup>  
as Al; \*as respirable fraction

**1309-48-4 magnesium oxide**

PEL Long-term value: 15\* mg/m<sup>3</sup>  
fume; \*total particulate

TLV Long-term value: 10\* mg/m<sup>3</sup>  
\*as inhalable fraction

**1314-13-2 zinc oxide**

PEL Long-term value: 15\* 5\*\* mg/m<sup>3</sup>  
\*total dust \*\*respirable fraction and fume

REL Short-term value: 10\*\* mg/m<sup>3</sup>  
Long-term value: 5\* 5\*\* mg/m<sup>3</sup>  
Ceiling limit value: 15\* mg/m<sup>3</sup>  
\*dust only \*\*fume

TLV Short-term value: 10\* mg/m<sup>3</sup>  
Long-term value: 2\* mg/m<sup>3</sup>  
\*as respirable fraction

**1304-28-5 barium oxide, obtained by calcining witherite**

PEL Long-term value: 0.5 mg/m<sup>3</sup>  
as Ba

REL Long-term value: 0.5 mg/m<sup>3</sup>  
as Ba

TLV Long-term value: 0.5 mg/m<sup>3</sup>  
as Ba

· **CAS No. Designation of material % Type Value Unit**

· **Additional Occupational Exposure Limit Values for possible hazards during processing:**

Observe general threshold limit for dust.

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

The usual protective measures based on the application have to be followed.

All protective equipment used shall be according to 29 CFR.1910 Subpart I Personal Protective Equipment

· **Breathing equipment:**

Under normal conditions of use not required.

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

· **Protection of hands:** Protective gloves

· **Material of gloves -**

· **Penetration time of glove material -**

· **Eye protection:** Goggles recommended during refilling.

· **Body protection:** Tight clothing



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**9 Physical and chemical properties**

<ul style="list-style-type: none"> <li>· <b>Information on basic physical and chemical properties</b></li> <li>· <b>General Information</b></li> <li>· <b>Appearance:</b> <ul style="list-style-type: none"> <li>Form: Cushion like ca. 20 x 20 x 7 mm</li> <li>Color: Colourless to slightly tinted</li> </ul> </li> <li>· <b>Odor:</b> Odorless</li> <li>· <b>Odour threshold:</b> Not applicable</li> </ul>	
· <b>pH-value:</b>	Not applicable
<ul style="list-style-type: none"> <li>· <b>Change in condition</b> <ul style="list-style-type: none"> <li>Melting point/Melting range: Undetermined.</li> <li>Boiling point/Boiling range: Undetermined.</li> </ul> </li> </ul>	
· <b>Flash point:</b>	Not applicable.
· <b>Ignition temperature:</b>	Not applicable
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
<ul style="list-style-type: none"> <li>· <b>Explosion limits:</b> <ul style="list-style-type: none"> <li>Lower: Not determined.</li> <li>Upper: Not determined.</li> </ul> </li> </ul>	
· <b>Density at 20 °C (68 °F):</b>	~ 2.5 g/cm <sup>3</sup> (~ 20.863 lbs/gal)
· <b>Vapour density</b>	Not determined.
<ul style="list-style-type: none"> <li>· <b>Solubility in / Miscibility with</b> <ul style="list-style-type: none"> <li>Water: Insoluble.</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>· <b>Viscosity:</b> <ul style="list-style-type: none"> <li>Dynamic: Not applicable.</li> </ul> </li> <li>· <b>Other information</b> No further relevant information available.</li> </ul>	

**10 Stability and reactivity**

<ul style="list-style-type: none"> <li>· <b>Possibility of hazardous reactions:</b> No further relevant information available.</li> <li>· <b>Reactivity</b> No further relevant information available.</li> <li>· <b>Chemical stability</b></li> <li>· <b>Thermal decomposition / conditions to be avoided:</b> Conditions to be avoided: see chapter 7. No decomposition if used and stored according to specifications.</li> <li>· <b>Possibility of hazardous reactions</b> No dangerous reactions known.</li> <li>· <b>Conditions to avoid</b> No further relevant information available.</li> <li>· <b>Incompatible materials:</b> No further relevant information available.</li> <li>· <b>Hazardous decomposition products:</b> No dangerous decomposition products known.</li> </ul>	
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**11 Toxicological information**

<ul style="list-style-type: none"> <li>· <b>Information on toxicological effects</b></li> <li>· <b>Acute toxicity:</b></li> <li>· <b>LD/LC50 values that are relevant for classification:</b> No toxicity data are available for the product itself.</li> </ul>	
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- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Eye irritation is possible after mechanical influence (dust).
- **On respiratory tract:** No irritant effect.
- **Sensitization:** No sensitizing effects known.
- **Other information (about experimental toxicology):**
- **Effects on reproduction, carcinogenic and mutagenic effects:**  
Carcinogenicity: no data available  
Mutagenicity: no data available  
Toxicity for reproduction: no information available
- **Additional toxicological information:**
- **Carcinogenic categories**
- **IARC (International Agency for Research on Cancer)**  
7631-86-9 Silica: 3
- **NTP (National Toxicology Program)**  
None of the ingredients is listed.
- **OSHA-Ca (Occupational Safety & Health Administration)**  
None of the ingredients is listed.

**12 Ecological information**

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

**13 Disposal considerations**

- **Waste treatment methods**
- **Recommendation:** Disposal according to instructions of local authorities
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

**14 Transport information**

· <b>UN-Number</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>UN proper shipping name</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	Void
· <b>Transport hazard class(es)</b>	
· <b>DOT, ADR, ADN, IMDG, IATA</b>	
· <b>Class</b>	Void

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· <b>Packing group</b> · DOT, ADR, IMDG, IATA	Void
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b>	Not applicable.
· <b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</b>	Not applicable.
· <b>UN "Model Regulation":</b>	-

**15 Regulatory information**

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

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

1314-13-2 zinc oxide: II

1304-28-5 barium oxide, obtained by calcining witherite: CBD

· **TLV (Threshold Limit Value established by ACGIH)**

1344-28-1 aluminium oxide: A4

1309-48-4 magnesium oxide: A4

1304-28-5 barium oxide, obtained by calcining witherite: A4

· **MAK (German Maximum Workplace Concentration)**

1344-28-1 aluminium oxide: 2

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

void

· **National regulations:**

· **Further information:** Version(s) 3 is/are not available for this language.

· **Regulation or reporting requirements USA**

· **Prop. 65 - Cancer**

not listed

**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Reasons for amendments:** Change of address

· **Replaces the version dated:** 09/17/2013

· **Department issuing SDS:**

KFT Chemieservice GmbH

Im Leuschnerpark. 3 64347 Griesheim

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Germany

Tel.: +49 6155 86829-0 Fax: +49 6155 86829-25

· **Contact:** Dr. Sonja Fischer

· **Date of preparation / last revision** 03/16/2015 / 4. 0

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• **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- DOT: US Department of Transportation
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- NFPA: National Fire Protection Association (USA)
- MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- Acute Tox. 4: Acute toxicity, Hazard Category 4
- Acute Tox. 3: Acute toxicity, Hazard Category 3
- Skin Corr. 1B: Skin corrosion/irritation, Hazard Category 1B
- Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
- Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
- Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
- Repr. 1B: Reproductive toxicity, Hazard Category 1B
- STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

• **\* Data compared to the previous version altered.**

Changes have been made to sections marked with a \*, as compared to the previous version.