Technische Sicherheitsinformationen in Anlehnung an das Format des Sicherheitsdatenblatts gemäß 1907/2006/EC (REACh), Annex II

Technical Safty Information

1. Identification oft he substance/mixture and company

1.1 Product identifier

Trade name
- EltroGlas - AG
- EltroGlas - AR
- EltroGlas - GL
- EltroGlas - LI
- EltroGlas - AL
- EltroGlas - CH
- EltroGlas - TH
- EltroGlas - AM

General name:	Inorganic Glass
CAS-number:	65997-17-3
EC-number:	266-046-0
notation:	„glass, oxide, chemicals“
REACH-Registration:	not subject to registration

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

Industrial and commercial use as technical glass for example for dispalys, touchscreens, HMI`s and input panels.

1.3 Details oft the supplier oft he Technical Safety Information

Manufacturer / Supplier:
Richard Wöhr GmbH
Gräfenau 58-60
D - 75339 Höfen / Enz
www.WoehrGmbH.de
www.EltroGlas.de

Contact for technical information: Pascal Simon / quality management representative

phone: +49 (0)7081 / 9540-334
e-mail: P.Simon@WoehrGmbH.de

1.4 Emergency number: +49 (0)7081 / 9540-0 (Mo-Fr, 7.30 am – 4.00 pm GMT)

2. Hazards identification

2.1	Classification of the substance or mixture:	Inorganic glass is not classified as dangerous
2.2	Label elements:	No labeling required
2.3	Other hazards:	Glass is not dangerous at normal use. Processing of glass, damage or breakage can result in sharp edges. This may cause cuts. Processing of glass can result in glass dust. Acute effects: Respiratory irritation.Chronic effects: Possible pneumoconiosis effects.Grinding debris and other waste of glass must be disposed consistent with applicable regulations.

3. Composition / Information on ingredients

3.1 Substances:

As the substance glass is not included in the candidate list of substances of very high concern, currently there are no information duties according to article 33 of REACH. However for the production of glass we may use substances, which are on the candidate list and had been included in Annex XIV of the REACH regulation or could be included in future. These powdery substances are not present as such in the final glass; they are fully integrated into the glass matrix through the melting process. Thus they loose their original characteristics.The main components are listed as additional information in chapter 16.

3.2 Mixtures: Glass is classified as substance acc. to regulation (EC) No 987/2008 (amending of Reach-Reg.).

4. First-aid-measures

4.1 Description of first-aid-measures

General information:	Glass is not a hazardous substance. The following information refer to glass dust or glass splinter which may result from processing or breakage.
After inhalation:	Supply fresh air. Consult doctor in case of complaints.
After skin contact:	Normally not dagerous. Consult doctor in case of complaints
After eye contact:	Rinse under running water. Consult doctor in case of complaints
After swallow:	consult doctor.

4.2 Most important symtomes and effects, both acute and delayed: None known

4.3 Indication of immediate medical attention and special treatment needed: none

5. Fire fighting measures

5.1	Extinguishing media:	no requirements
5.2	Spcial hazards arising from the substance or mixture:	none. Glass is noncumbustable
5.3	Advice for firefighters:	none

6. Accidental release measures

6.1	Personal precautions, protective equipment and emergency procedures:	none
6.2	Enviromental Precautions:	none
6.3	Methods an materials for Containment and cleaning up:	none
6.4	Reference to other sections:	none

7. Handling and storage

7.1	Precautions for safty handling:	Avoid breakage because of injury risk by sharp edges.
7.2	Conditions for safe storage, including any incompatibilities:	Store in a dry environment. Avoid excessive humidity.
7.3	Specific end use(s):	see section 1.2

8. Exposure controls / personal protection

8.1 Control parameters

In case of dust is formation:	Declaration for FUSED SILICA CAS No.: 60676-86-0
Regulation:	TRGS 900 – GERMAN OCCUPATIONAL EXPOSURE LIMIT VALUES (1/2006)
Value:	0,3mg / m³ (EXPOSURE LIMIT VALUE) with reference tot he respirable fraction.
Peak limit:	not specified
teratogenic:	There is no reason to fear a risk of damage tot he developing embryo or foetus when limit value is adhered to.

8.2	Exposure controls:	Technical measures and appropriate work processes have priority then personal protective equipment. Provide adequate ventilation by local exhaust ventilation or ventilation is general. Adequate assesment tools for verification of effectivity oft he protective measures includes methods of measurements as describted in Technical rules for hazardous substances (TRGS) 402.
	Respiratory Protection:	Technical measure: wet grinding / processing, avoid dust formation. If glass dust or particulates are above national exposure, limits use a national approved respirator for dust and fibers.
	Hand Protection:	Use protective gloves and savty glasses that meet national standards.
	Eye Protection:	Use industrial safety glasses tahts meet national standards.
	Personnel Protection:	Use safty skirting for protection from sharp edges. Wear safty shoes.

9. Physical- and chemical properties

9.1 Information on basic physical an chemical properties

Appearance Physical state:	solid
Colour:	transparent
Odour:	odourless
pH-value:	not applicable
Boilling ponit / boilling range:	not applicable
Melting point / melting range:	540°C (transformation temperature acc. ISO 7884-8)
Flashpoint:	not combustable
Combustability:	not combustable
Ignition temperature:	none
Auto flammability:	none
Danger of explosion:	none
Explosive limit upper / lower:	none
Oxidizing characteristics:	none
Vapour pressure:	not applicable
Density (20°C):	2,45g/cm²
Water solubility:	not applicable
Fat solubility:	not applicable
n-Octanol-water partition coefficient:	not applicable
other information:	none

9.2 Other information: none

10. Stability and Reactivity

10.1 Reactivity:	Glass is a stable material. Glass is inert to many chemicals, but may react to hot, strong alkaline solutions and with hydrofluoric, fluorsilicic and phosphoric acids. When heated to temperatures above the melting point, metal oxide fumes may be emitted. Glass is amorphous, inorganic, usually transparent od translucent substance consisting of a mixture of silicates or sometimes borates or phosphates as glass formers. With additions of modifiers a melt is produce at high temperatures, that cools to a solid state without crystallization.
10.2 Chemical stability:	Glass is stable under normal environmental conditions.
10.3 Possibility of hazardous reactions:	No hazardous reactions at intended use.
10.4 Conditions to avoid:	see section 10.1
10.5 Incompatible materials:	see section 10.1
10.6 Hazardous decomposition products:	see section 10.1.1

11. Toxicological information:

11.1 Information on toxicological effects:	Toxicological data are not available.

12. Ecological data:

12.1 Toxicity:	unknown
12.2 Persistence and degradability:	unknown
12.3 Bioaccumulation potential:	unknown
12.4 Mobility in soil:	unknown
12.5 Result oft PBT and vPvB assesment:	unknown
12.6 Other adverse effects:	unknown

13. Disposal considerations

13.1 Waste treatment methods:	Disposal accordning to local regulations.

14. Transport information

14.1 UN Number:	no requirements
14.2 UN Proper Shipping Name:	no requirements
14.3 Transport hazard class(es):	no requirements
14.4 Packing group:	no requirements
14.5 Environmentally hazards:	no requirements
14.6 Special precautions for user:	see section 6 to 8
14.7 Transport in bulk according to Annex II of the MARPOL73/78 and the IBC-Code:	no requirements

15. Regulatory information

15.1 Safty, health an environmental regulations/legislationspecific for the substance or mixture.

REACH	Under REACH glass is classified as a „Substance“. According to Appendix V number 11 of the REACh regulation glass is exempted from registration if specified conditions are met. The Richard Wöhr GmbH has examined this conditions for the products. This glass is not subject to registration.
RoHS	This glass does not contain -according to our knowledge -material in concentrations, whoes placing on the market is forbidden in accordance tot he current requirements of European Directive 2011/65/EU.
United Nations Globally Harmonised System (UN-GHS)	This information considers also requirements oft he UN-GHS relaited to safety information.

15.2 Chemical Safety Assessment: A Chemical Safty Assesment has not been carried out.

16. Other information

16.1 Composition of mixture according to raw materials based on the oxides:

Chemical name	CAS-No.	Proportion of weight %	SVHC (REACH) (Y/N)	Reg. (Y/N)	OSHA PEL	ACGIH TLV	Carc. (Y/N)
Silica	14808-60-7	<1	No	Yes	0,1mg/m³	0,025mg/m³	No
Titanium Oxide	13463-67-7	<1	No	Yes	15mg/m³	10mg/m³	No
Floatglass	65997-17-3	90-100	No	Yes	15mg/m³	10mg/m³	No

The classifications and limiting valuesare validfor the raw materials, see section 3.
Glass is not substance of very high concern (SVHC)

Explanations to the data in the table:

SVHC (REACH)	The raw material is listed in the candidate list of the substances of very high concern.
Reg.	Regulated chemical substances according to OSHA Regulations (Standards-29CFR) Subpart 1910.1000 Tables Z1 to Z3 limits for Air Contamonants.
OSHA / PEL	Permissible exposure limit – for chemical substance, issued by OSHA.
ACGIH / TLV	Threshold limit value – chemical substances classification by the ACGIH.
OSHA	Occupational Safety and Health Administration, an organization of the US. Department of Labor (www.osha.gov).
ACGIH	American Conference of Governmental Industrial Hygienists (ACGIH), an member-based organization that advances occupational and environmental health.
Carc.	Classification as carcinogenic.

16.2 Disclaimer: This information is based on our present knowledge and believed tob e correct at The date of publication. However, no representation is made concerning its accurancy and completeness. It is intended as guidiance only, and its not be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are describted, we can not guarnantee that these are the only hazards that exist.

16.3 Changes: Rev.-Stand: 1.0 Creation A.Schiele