Printing date 02.05.2023 Version number 1 Revision: 02.05.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· 1.1 Product identifier

· Trade name: Potassium silicate glasses

· Article number: 397 · CAS Number: 1312-76-1 · EC number:

215-199-1

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

No further relevant information available.

· Application of the substance / the mixture

Chemical.

Production of silica gels, flame retardants, preparation of cements, drinking water treatment aids, Coating binder, textile industry, building waterproofing, detergent additive.

- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Möller Chemie GmbH & Co. KG

Bürgerkamp 1 D-48565 Steinfurt Tel.: 02551/9340-0 Fax: 02551/9340-60

- · Further information obtainable from: Product safety department
- · 1.4 Emergency telephone number:

Poison Control Center Mainz - 24 hour emergency service - Tel.: +49 (0) 6131/19240

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

The substance is not classified, according to the CLP regulation.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · 2.3 Other hazards

The product does not contain any substance above the legal limits included on the list for endocrine disrupting properties established under Article 59(1) of Regulation (EC) No 1907/2006 or under Commission Delegated Regulation (EU) 2017/2100 or of Commission Regulation (EU) 2018/605 has endocrine disrupting properties.

- · Results of PBT and vPvB assessment
- · PBT:

The product does not contain any substances above legal limits that meet the criteria for PBT (persistent, bioaccumulative and toxic).

· vPvB:

The product does not contain any substances above legal limits that meet the criteria for vPvB (very persistent and very bioaccumulative).

SECTION 3: Composition/information on ingredients

- · 3.1 Substances
- · CAS No. Description

1312-76-1 Potassium silicate glasses 28/30 %

(Contd. on page 2)

Printing date 02.05.2023 Version number 1 Revision: 02.05.2023

Trade name: Potassium silicate glasses

(Contd. of page 1)

- · Identification number(s)
- · EC number: 215-199-1

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

Remove any contact lenses if possible. Rinse further.

· After swallowing:

Rinse out mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

- · 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- · 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- Suitable extinguishing agents:

Water spray, alcohol-resistant foam, fire extinguishing powder, carbon dioxide (CO2)

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- · 5.3 Advice for firefighters

Do not inhale explosion gases and fumes

Extinguishing measures to suit the environment

Do not let fire-fighting water get into the canals and bodies of water.

Collect contaminated fire fighting water separately.

Fight fire with normal precautions from a reasonable distance.

· Protective equipment: Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Danger of slipping after leakage or spillage.

Avoid contact with eyes and skin

- 6.2 Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomaceous earth, acid binder, universal binder, sawdust).

· 6.4 Reference to other sections

No dangerous substances are released.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Open and handle receptacle with care.

Avoid contact with eyes and skin.

Do not breathe vapour/aerosol

(Contd. on page 3)

Printing date 02.05.2023 Version number 1 Revision: 02.05.2023

Trade name: Potassium silicate glasses

(Contd. of page 2)

- · Information about fire and explosion protection: Usual preventive fire protection measures.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Keep container tightly closed and store in a dry and well-ventilated place.

- Information about storage in one common storage facility: Do not store together with acids.
- · Further information about storage conditions:

Protect from heat and direct sunlight.

Protect from frost, heat and direct sunlight.

- · Storage class: 12
- · 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Appropriate engineering controls No further data; see item 7.
- · Individual protection measures, such as personal protective equipment
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- Respiratory protection: Suitable respiratory protective device recommended.
- · Hand protection

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

NBR: acrylonitrile butadiene rubber

CR: chloroprene (chlorobutadiene) rubber

Polyvinyl chloride

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye/face protection



Tightly sealed goggles

· **Body protection:** Protective work clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
- · General Information

Physical state
Colour:
Odour:
Odourless
Odour threshold:
Not determined.

• Melting point/freezing point: $< 0 \, ^{\circ}C$

· Boiling point or initial boiling point and boiling

range > 100 °C

(Contd. on page 4)

Printing date 02.05.2023 Version number 1 Revision: 02.05.2023

Trade name: Potassium silicate glasses

	(Contd. of page
Lower and upper explosion limit	
Lower:	Not determined.
Upper:	Not determined.
Flash point:	Not determined
Decomposition temperature:	Not determined.
pH at 20 °C	11.5
Viscosity:	
Kinematic viscosity	Not determined.
Dynamic at 20 °C:	40 mPas
Solubility	
water:	Not determined.
Partition coefficient n-octanol/water (log value)	Not determined.
Vapour pressure at 20 °C:	5-20 hPa
Density and/or relative density	
Density at 20 °C:	$1.24 - 1.26 \text{ g/cm}^3$
Relative density	Not determined.
Vapour density	Not determined.
9.2 Other information	No further relevant information available.
Appearance:	v
Form:	Fluid
Important information on protection of health an environment, and on safety.	d
Auto-ignition temperature:	Not determined.
Explosive properties:	Product does not present an explosion hazard.
Change in condition	1 roduct does not present an expression nazara.
Evaporation rate	Not determined.
•	
Information with regard to physical hazard classe	void
Explosives	void Void
Flammable gases	void Void
Aerosols	Void Void
Oxidising gases	void Void
Gases under pressure	voia Void
Flammable liquids Flammable solids	voia Void
	voia Void
Self-reactive substances and mixtures	voia Void
Pyrophoric liquids	
Pyrophoric solids	Void
Self-heating substances and mixtures	Void
Substances and mixtures, which emit flammable	Void
gases in contact with water	Void
Oxidising liquids	Void
Oxidising solids	Void
Organic peroxides	Void
Corrosive to metals	Void

SECTION 10: Stability and reactivity

- · 10.1 Reactivity This material is non-reactive under normal ambient conditions.
- 10.2 Chemical stability

· Desensitised explosives

The material is stable under normal environmental conditions and under the temperature and pressure conditions expected during storage and handling.

Void

- · 10.3 Possibility of hazardous reactions Reacts with acids.
- · 10.4 Conditions to avoid No further relevant information available.
- · 10.5 Incompatible materials:

Light metals (due to the development of hydrogen in an acidic/alkaline environment)

(Contd. on page 5)

Printing date 02.05.2023 Version number 1 Revision: 02.05.2023

Trade name: Potassium silicate glasses

(Contd. of page 4)

· 10.6 Hazardous decomposition products:

Reasonably to be expected, dangerous decomposition products, which are formed during use, storage, spillage and heating, are not known.

SECTION 11: Toxicological information

- · 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008
- · Acute toxicity Based on available data, the classification criteria are not met.
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Low irritation possible not required for identification.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- · Reproductive toxicity Based on available data, the classification criteria are not met.
- · STOT-single exposure Based on available data, the classification criteria are not met.
- · STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.
- · 11.2 Information on other hazards
- · Endocrine disrupting properties Substance is not listed.

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity:

Daphnia toxicity:

 $E\bar{C}50 > 100 \text{ mg/l}$

Fish toxicity:

LC50 > 100 mg/l

Bacterial Toxicity:

EC50 > 100 mg/l

- · 12.2 Persistence and degradability No further relevant information available.
- · 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 Mobility in soil No further relevant information available.
- · 12.5 Results of PBT and vPvB assessment
- **PBT**: The product is not considered to be persistent, bioaccumulating nor toxic (PBT).
- · vPvB: The product is not considered to be persistent or very bioaccumulative (vPvB).
- 12.6 Endocrine disrupting properties For information on endocrine disrupting properties see section 11.
- · 12.7 Other adverse effects No further relevant information available.
- · Additional ecological information:
- · General notes:

Water hazard class 1 (German Regulation) (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Disposal according to local regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

EU

 Printing date 02.05.2023
 Version number 1
 Revision: 02.05.2023

Trade name: Potassium silicate glasses

(Contd. of page 5)

14.1 UN number or ID number ADR, ADN, IMDG, IATA	Void	
14.2 UN proper shipping name ADR, ADN, IMDG, IATA	Void	
14.3 Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	Void	
14.4 Packing group ADR, IMDG, IATA	Void	
14.5 Environmental hazards:	Not applicable.	
14.6 Special precautions for user	Not applicable.	
14.7 Maritime transport in bulk according instruments	g to IMO Not applicable.	
UN "Model Regulation":	Void	

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I Substance is not listed.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 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.

- · Department issuing SDS: Product safety department
- · Contact: Mrs. Steyer
- · Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative