

## SILCAFLEX 160H

Version number: 1.0

First version: 21.01.2025

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

#### 1.1 Product identifier

**Identification of the substance** aluminum silicate (polycrystalline wool)  
**Trade name** **SILCAFLEX 160H**  
**Registration number (REACH)**  
**CAS number** 675106-31-7

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

**Relevant identified uses** Thermal insulating material

#### 1.3 Details of the supplier of the safety data sheet

SILCA Service- und Vertriebsgesellschaft für Dämmstoffe mbH  
Elberfelder Straße 200a  
D-40822 Mettmann  
Germany

Telephone: +49 (0) 2104 9727-0  
Telefax: +49 (0) 2104 9727-25  
e-mail: reach@silca-online.de  
Website: www.silca-online.de

**e-mail (competent person)** sdb@csb-compliance.com

Please do not use this e-mail address to ask for the latest safety data sheet. For this purpose contact SILCA Service- und Vertriebsgesellschaft für Dämmstoffe mbH.

#### 1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
Germany	Giftinformationszentrum - Nord Göttingen	+49 551 19240

As above or nearest toxicological information centre.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

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

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

## 2.2 Label elements

### Labelling according to Regulation (EC) No 1272/2008 (CLP)

Not required.

## 2.3 Other hazards

Formulate and implement local codes of practice for the safety of personnel, as required.

May be harmful if swallowed or if inhaled.

### Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

### Endocrine disrupting properties

Not listed.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (article).

<b>Name of substance</b>	aluminum silicate (polycrystalline wool)
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#### Identifiers

REACH Reg. No

CAS No	675106-31-7
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## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General notes

Self-protection of the first aider.

In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following inhalation

Provide fresh air.

#### Following skin contact

Rinse skin with water/shower.

If skin irritation occurs: Get medical advice/attention.

#### Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

#### Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

#### Notes for the doctor

None.

## 4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

## 4.3 Indication of any immediate medical attention and special treatment needed

None.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

water, foam, alcohol resistant foam, fire extinguishing powder

#### Unsuitable extinguishing media

water jet

### 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

### 5.3 Advice for firefighters

Non-combustible.

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

#### Special protective equipment for firefighters

Wear self-contained breathing apparatus

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Ventilate affected area.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

#### For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

If substance has entered a water course or sewer, inform the responsible authority.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Take up mechanically.

**Advice on how to clean up a spill**

Take up mechanically.

**Other information relating to spills and releases**

Place in appropriate containers for disposal.

Ventilate affected area.

**6.4 Reference to other sections**

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

## SECTION 7: Handling and storage

**7.1 Precautions for safe handling**

Avoid contact with eyes.

Do not breathe dust.

**Measures to prevent fire as well as aerosol and dust generation**

Use local and general ventilation.

Removal of dust deposits.

**Specific notes/details**

Dust deposits may accumulate on all deposition surfaces in a technical room.

**Measures to protect the environment**

Avoid release to the environment.

**Advice on general occupational hygiene**

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

**7.2 Conditions for safe storage, including any incompatibilities****Flammability hazards**

None.

**Incompatible substances or mixtures**

Incompatible materials: see section 10.

**Protect against external exposure, such as**

humidity, high pressure, strong shocks

**Consideration of other advice**

Keep away from food, drink and animal feedingstuffs.

**Ventilation requirements**

Provision of sufficient ventilation.

**Specific designs for storage rooms or vessels**

Keep container tightly closed.

Store in a dry place.

## Packaging compatibilities

Keep only in original container.

## 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Notation	Source
DE	dust	-	MAK	-	4	-	-	i	DFG
DE	dust	-	AGW	-	10	-	20	Y, i	TRGS 900
DE	dust	-	AGW	-	1,25	-	2,5	Y, r	TRGS 900
DE	dust	-	MAK	-	0,3	-	2,4	r, ex-uf-dust	DFG
DE	aluminum silicate fibres	-	CMR/GW	-	10.000	-	-	DE-AGW- AlSiO <sub>2</sub> , fib/m <sup>3</sup> , AR	TRGS 910
DE	aluminum silicate fibres	-	CMR/GW	-	100.000	-	800.000	DE-AGW- AlSiO <sub>2</sub> , fib/m <sup>3</sup> , TR	TRGS 910
DE	aluminium, insoluble compounds	1344-28-1	MAK	-	0,5	-	4	i	DFG
DE	aluminium, insoluble compounds	1344-28-1	MAK	-	0,05	-	0,4	r	DFG
EU	refractory ceramic fibres	-	IOELV	-	0,3	-	-	fib/ml	2017/2398/EU

#### Notation

AR acceptable risk

DE-AGW-  
AlSiO<sub>2</sub> refractory ceramic fibers according to Directive 2004/37/EG

ex-uf-dust except ultrafine particles

fib/ml fibres/ml

fib/m<sup>3</sup> fibres/m<sup>3</sup>

i inhalable fraction

r respirable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TR risk of tolerance

## Notation

TWA	time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)
Y	a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

## 8.2 Exposure controls

### Appropriate engineering controls

Use local and general ventilation.

### Individual protection measures (personal protective equipment)

#### Eye/face protection

Use safety goggle with side protection (EN 166).

#### Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
no information available	no information available	no information available

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

#### Body protection

Protective clothing for use against solid particulates.

(EN 13832, EN 340, EN 14605).

#### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particle filter device (DIN EN 143).

#### Environmental exposure controls

Use appropriate container to avoid environmental contamination.

Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	solid (Mats)
Colour	white
Odour	odourless
Melting point/freezing point	>1.800 °C

<b>Boiling point or initial boiling point and boiling range</b>	not determined
<b>Flammability</b>	non-combustible
<b>Lower and upper explosion limit</b>	not applicable (solid)
<b>Flash point</b>	not applicable
<b>Auto-ignition temperature</b>	not applicable (solid)
<b>Decomposition temperature</b>	not relevant
<b>pH (value)</b>	not applicable
<b>Viscosity</b>	not relevant (solid)
<b>Solubility(ies)</b>	
Water solubility	<1 mg/l at 20 °C
<b>Partition coefficient n-octanol/water (log value)</b>	not relevant (inorganic)
<b>Vapour pressure</b>	not determined
<b>Density and/or relative density</b>	
Density	2,95 g/cm <sup>3</sup>
Relative vapour density	not relevant (solid)
<b>Particle characteristics</b>	no data available

## 9.2 Other information

<b>Information with regard to physical hazard classes</b>	hazard classes acc. to GHS (physical hazards): not relevant
<b>Other safety characteristics</b>	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.  
See below "Conditions to avoid".

**10.3 Possibility of hazardous reactions**

No known hazardous reactions.

**10.4 Conditions to avoid**

Protect from moisture.

Control of dust.

**10.5 Incompatible materials**

There is no additional information.

**10.6 Hazardous decomposition products**

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

**SECTION 11: Toxicological information****11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

If not otherwise specified the classification is based on:

Animal studies; Evidence from any other toxicity tests; Expert judgement (weight of evidence determination).

**Classification according to GHS (1272/2008/EC, CLP)**

This substance does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

**Acute toxicity**

Shall not be classified as acutely toxic (oral).

Exposure route	Endpoint	Value	Species	Method	Source
oral	LD50	>4.000 mg/kg	rat	-	ECHA

**Skin corrosion/irritation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Serious eye damage/eye irritation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Respiratory or skin sensitisation****Skin sensitisation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Respiratory sensitisation**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.



**Germ cell mutagenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Carcinogenicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Reproductive toxicity**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - single exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Specific target organ toxicity - repeated exposure**

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

**Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

**11.2 Information on other hazards****Endocrine disrupting properties**

Not listed.

**SECTION 12: Ecological information****12.1 Toxicity****Aquatic toxicity (acute)**

No data available.

**Aquatic toxicity (chronic)**

No data available.

**12.2 Persistence and degradability****Biodegradation**

The study does not need to be conducted because the substance is inorganic.

**Persistence**

The study does not need to be conducted because the substance is inorganic.

**12.3 Bioaccumulative potential****n-octanol/water (log KOW)**

not relevant  
(inorganic)

**12.4 Mobility in soil**

No data available.

## 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

## 12.6 Endocrine disrupting properties

Not listed.

## 12.7 Other adverse effects

Data are not available.

### Remarks

Wassergefährdungsklasse, WGK (water hazard class): 2.

Keep away from drains, surface and ground water.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

### Remarks

Please consider the relevant national or regional provisions.

## SECTION 14: Transport information

14.1	UN number or ID number	not assigned
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	-
14.4	Packing group	-
14.5	Environmental hazards	-
14.6	Special precautions for user	-
14.7	Maritime transport in bulk according to IMO - instruments	-

**SECTION 15: Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Relevant provisions of the European Union (EU)****Restrictions according to REACH, Annex XVII**

Not listed.

**List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list**

Not listed.

**Seveso Directive**

Not assigned.

**Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)**

Not listed.

**Regulation on the marketing and use of explosives precursors**

Not listed.

**Regulation on drug precursors**

Not listed.

**Regulation on substances that deplete the ozone layer (ODS)**

Not listed.

**Regulation concerning the export and import of hazardous chemicals (PIC)**

Not listed.

**Regulation on persistent organic pollutants (POP)**

Not listed.

**National regulations (Germany)****Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)**

Wassergefährdungsklasse, WGK 2  
(water hazard class)

**Technical instructions on air quality control (Germany)**

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
5.2.1	total dust, including micro-dust	-	≥ 25 wt%	0,2 kg/h	20 mg/m <sup>3</sup>	2)

**Notation**

- 2) even with a mass flow smaller than or equal to 0.20 kg/h, a mass concentration of 0.15 g/m<sup>3</sup> in waste gas may not be exceeded

## Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 13  
(non-combustible solids)

## Chemikalien-Verbotsverordnung (Chemicals Prohibition Ordinance) - ChemVerbotsV

not listed

### Other information

Observe occupational restrictions for mothers acc. to §§ 11 and 12 MuSchG!

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance by the supplier.

## SECTION 16: Other information

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
2017/2398/EU	Directive of the European Parliament and of the Council amending Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens or mutagens at work
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
AGW	Workplace exposure limit
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG	International Maritime Dangerous Goods Code
IOELV	Indicative occupational exposure limit value
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million

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Abbr.	Descriptions of used abbreviations
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TRGS 910	Risikobezogenes Maßnahmenkonzept für Tätigkeiten mit krebserzeugenden Gefahrstoffen
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

## Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Responsible for the safety data sheet

C.S.B. GmbH  
Dujardinstr. 5  
47829 Krefeld  
Germany

Telephone: +49 (0) 2151 - 652086 - 0  
Telefax: +49 (0) 2151 - 652086 - 9  
e-Mail: [info@csb-compliance.com](mailto:info@csb-compliance.com)  
Website: [www.csb-compliance.com](http://www.csb-compliance.com)

## Disclaimer

This information is based upon the present state of our knowledge.

This SDS has been compiled and is solely intended for this product.