

CALSITHERM Klimaplatte-SILCA-SILCAL-SILCAPAN-MICROCAL

Version number: 10.0
Replaces version of: 26.08.2024 (9)

Revision: 17.06.2025
First version: 03.09.2014

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

1.1 Product identifier

Trade name

Product

CALSITHERM® Klimaplatte-WF, -F
SILCA® 170SB / 200 / 250 / 250SB / 250KM
SILCA® BT50
SILCA® T300, SILCA T500
SILCAL® 900 / 1000 / 1100 / 900MD
SILCAPAN 500
MICROCAL® 1100
SILCA 250KM-HD

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

Relevant identified uses

Mineral thermal insulation panels

1.3 Details of the supplier of the safety data sheet

CALSITHERM Silikatbaustoffe GmbH
An der Eiche 15
D-33175 Bad Lippspringe
Germany

Telephone: +49 (0)5254 99092-0
Telefax: +49 (0)5254 99092-17
e-mail: info@calsitherm.de
Website: www.calsitherm.de

CALSITHERM International GmbH
An der Eiche 15
33175 Bad Lippspringe

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

telephone: +49(0) 2104 9727-0
telefax: +49(0) 2104 9727-25
e-Mail: reach@silca-online.de
website: www.silca-online.de

SILCA Italia srl
Via Mattei 5/11
30037 Scorze (VE)
Italia

telephone: +39 (041) 584 122 0
telefax: +39 (041) 447 130
e-mail: info@silca-italia.it
website: www.silca-italia.it

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 CALSITHERM Silikatbaustoffe GmbH.

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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 mixture 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

Inhalation of dust may cause respiratory irritation.

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (article).

3.2 Mixtures

Not relevant (article).

Hazardous ingredients acc. to EU regulation

None

Product of ingredients listed below

calciumsilicate, cellulose

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Self-protection of the first aider.

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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

Following inhalation

Dust: Provide fresh air.

In case of respiratory tract irritation, consult a physician.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Dust: Rinse cautiously with water for several minutes.

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

Following ingestion

The product itself cannot be swallowed.

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, co-ordinate firefighting measures to the fire surroundings

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Deposited combustible dust has considerable explosion potential.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO₂)

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

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Self-contained breathing apparatus (EN 133)

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.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

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

Hazardous combustion products: see section 5.

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.

Take precautionary measures against static discharge.

Removal of dust deposits.

Ground/bond container and receiving equipment.

Specific notes/details

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

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Measures to protect the environment

Avoid release to the environment.

Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

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, vibration, 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

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 ³]	STEL [ppm]	STEL [mg/m ³]	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

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Notation

ex-uf-dust	except ultrafine particles
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)
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

Human health values

Relevant DNELs of components						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
calciumsilicate	1344-95-2	DNEL	4 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Environmental values

Relevant PNECs of components				
Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
calciumsilicate	1344-95-2	PNEC	4 mg/l	freshwater

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Dust generation: Use safety goggle with side protection (EN 166).

Hand protection

Wear suitable gloves (Textiles, Leather).

Body protection

Protective clothing for use against solid particulates.
(EN 13832, EN 340, EN 13034, EN 14605).

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Particle filter device (DIN EN 143).

Environmental exposure controls

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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 (panels)
Colour	light grey
Odour	odourless
Melting point/freezing point	1.500 °C
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not applicable (solid)
Flash point	not applicable
Auto-ignition temperature	not applicable (solid)
Decomposition temperature	not relevant
pH (value)	9 – 11 (in aqueous solution: 100 g/l, 20 °C)
Viscosity	not relevant (solid)
Solubility(ies)	
Water solubility	not determined
Partition coefficient n-octanol/water (log value)	not relevant (inorganic)
Vapour pressure	not determined
Density and/or relative density	
Density	150 – 550 kg/m ³ at 20 °C
Relative vapour density	not relevant (solid)
Particle characteristics	no data available

9.2 Other information

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	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

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.4 Conditions to avoid

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.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Classification procedure

If not otherwise specified the classification is based on:

Ingredients of the mixture (additivity formula).

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

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

Acute toxicity

Test data are not available for the complete mixture.

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Acute toxicity of components							
Name of substance	CAS No	Exposure route	End-point	Value	Species	Method	Source
calciumsilicate	1344-95-2	oral	LD50	>5.000 mg/kg	rat	OECD Guideline 401	ECHA
calciumsilicate	1344-95-2	dermal	LD50	>5.000 mg/kg	rabbit	OECD Guideline 402	ECHA
calciumsilicate	1344-95-2	inhalation: dust/mist	LC0	≥58,8 mg/l/4h	rat	OECD Guideline 403	ECHA
cellulose	9004-34-6	oral	LD50	>5.000 mg/kg	rat	-	GESTIS
cellulose	9004-34-6	dermal	LD50	>2.000 mg/kg	rabbit	-	GESTIS
cellulose	9004-34-6	inhalation: dust/mist	LC50	>5,8 mg/l/4h	rat	-	GESTIS

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

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:

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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.

Symptoms related to the physical, chemical and toxicological characteristics

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Respirable dust which may arise increases the relative lung cancer risk in humans.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Exposure time	Value	Species	Method	Source
calciumsilicate	1344-95-2	LL50	96 h	$>1.000 \text{ mg/l}$	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA
calciumsilicate	1344-95-2	EL50	72 h	$>1.000 \text{ mg/l}$	algae (Desmodesmus subspicatus)	OECD Guideline 201	ECHA
calciumsilicate	1344-95-2	EL50	48 h	$>10.000 \text{ mg/l}$	daphnia magna	OECD Guideline 202	ECHA

Aquatic toxicity (chronic)

No data available.

12.2 Persistence and degradability

Biodegradation

No data available.

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Persistence

No data available.

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

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

12.7 Other adverse effects

No data available.

Remarks

Wassergefährdungsklasse, WGK (water hazard class): 1.

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 subject to transport regulations
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	-

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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

None of the ingredients are listed.

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

None of the ingredients are listed.

Seveso Directive

Not assigned.

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

None of the ingredients are listed.

Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

Regulation on drug precursors

None of the ingredients are listed.

Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

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

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (Germany)

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

Wassergefährdungsklasse, WGK 1
(water hazard class) - classification acc. to annex 1 (AwSV)

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 ³	2)

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Notation

- 2) even with a mass flow smaller than or equal to 0.20 kg/h, a mass concentration of 0.15 g/m³ 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

none of the ingredients are 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 mixture by the supplier.

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Product: CALSIHERM® Klimaplatte-WF, -F SILCA® 170SB / 200 / 250 / 250SB / 250KM SILCA® BT50 SILCA® T300, SILCA T500 SILCAL® 900 / 1000 / 1100 / 900MD SILCAPAN 500 MICROCAL® 1100	Product: CALSIHERM® Klimaplatte-WF, -F SILCA® 170SB / 200 / 250 / 250SB / 250KM SILCA® BT50 SILCA® T300, SILCA T500 SILCAL® 900 / 1000 / 1100 / 900MD SILCAPAN 500 MICROCAL® 1100 SILCA 250KM-HD
8.1	-	Occupational exposure limit values (Workplace Exposure Limits): change in the listing (table)
8.2	Body protection: Protective clothing for use against solid particulates. (EN 13832, EN 340, EN 14605).	Body protection: Protective clothing for use against solid particulates. (EN 13832, EN 340, EN 13034, EN 14605).

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
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)

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

Abbr.	Descriptions of used abbreviations
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)
DNEL	Derived No-Effect Level
ED	Endocrine disruptor
EL50	Effective Loading 50 %: the EL50 corresponds to the loading rate required to produce a response in 50% of the test organisms
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
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
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)
LL50	Lethal Loading 50 %: the LL50 corresponds to the loading rate causing 50 % lethality
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
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)
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.

CALSITHERM Klimaplatte-SILCA- SILCAL-SILCAPAN-MICROCAL

Version number: 10.0

Revision: 17.06.2025

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).

Classification procedure

Physical and chemical properties.
Health hazards.
Environmental hazards.
The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

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
Website: 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.