

CALCAST Carbon Composit

Version number: 2.0
Replaces version of: 2014-09-05 (1)

Revision: 2018-04-18
First version: 2014-09-05

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

1.1 Product identifier

Trade name	CALCAST Carbon Composit
	Calcast CC 60, 60-4, -8, -16
	Calcast CC 155, -G4, -G8, -G16
	Calcast CC 105-G8

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

Relevant identified uses	Mineral thermal insulation panels
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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
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e-mail (competent person)	sdb@csb-online.de
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Please do not use this e-mail adress to ask for the latest safety data sheet. For this purpose contact Calsitherm Silikatbaustoffe GmbH.

National contact	+49 (0)5254 99092-30 / -20
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1.4 Emergency telephone number

As above or next toxicological information centre.

CALCAST Carbon Composit

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.2 Label elements

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

not required

2.3 Other hazards

There is no additional information.

SECTION 3: Composition/information on ingredients

3.1 Substances

not relevant (article)

Constituents

Name of substance	Identifier
wollastonite (calcium metasilicate)	CAS No 13983-17-0 EC No 237-772-5
calciumsilicate	CAS No 1344-95-2 EC No 215-710-8
graphite	CAS No 7782-42-5 EC No 231-955-3
carbon fiber	CAS No 308063-56-1 EC No 926-722-4

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

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

Following inhalation

Provide fresh air.

CALCAST Carbon Composit

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Rinse cautiously with water for several minutes.

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

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

These information are 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

co-ordinate firefighting measures to the fire surroundings

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

5.3 Advice for firefighters

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

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

use suitable 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.

CALCAST Carbon Composit

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

Advices on how to contain a spill

take up mechanically

Advices 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

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

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.

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

CALCAST Carbon Composit

Ventilation requirements

Provision of sufficient ventilation.

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	Notation	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
GB	MMMF (machine-made mineral fibre)			WEL		5			EH40/2005
GB	MMMF (machine-made mineral fibre)		fib/ml	WEL		2			EH40/2005
GB	dust		i	WEL		10			EH40/2005
GB	dust		r	WEL		4			EH40/2005
GB	calcium silicate	1344-95-2	i	WEL		10			EH40/2005
GB	calcium silicate	1344-95-2	r	WEL		4			EH40/2005
GB	graphite	7440-44-0	i	WEL		10			EH40/2005
GB	graphite	7440-44-0	r	WEL		4			EH40/2005

Notation

fib/ml fibres/ml

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)

Relevant DNELs of components of the mixture						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
graphite	7782-42-5	DNEL	1.2 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

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

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Dust-Development: Use safety goggle with side protection.

Hand protection

Wear suitable gloves.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
Particulate filter device (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

Appearance

Physical state	solid
Form	planes
Colour	light grey - dark grey
Odour	odourless
Odour threshold	these information are not available

Other safety parameters

pH (value)	9 – 11 (suspension)
Melting point/freezing point	~1,500 °C
Initial boiling point and boiling range	these information are not available
Flash point	not applicable
Evaporation rate	these information are not available

CALCAST Carbon Composit

Flammability (solid, gas)	non-combustible
Explosion limits of dust clouds	not determined
Vapour pressure	these information are not available
Density	these information are not available
Vapour density	these information are not available
Bulk density	700 – 1,200 kg/m ³
Relative density	these information are not available
Solubility(ies)	
Water solubility	these information are not available
Partition coefficient	
n-octanol/water (log KOW)	these information are not available
Auto-ignition temperature	not relevant (Solid matter)
Relative self-ignition temperature for solids	these information are not available
Decomposition temperature	these information are not available
Viscosity	
Kinematic viscosity	not relevant (solid matter)
Dynamic viscosity	not relevant (solid matter)
Explosive properties	not explosive
Oxidising properties	shall not be classified as oxidising

9.2 Other information

None

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.

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

CALCAST Carbon Composit

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 toxicological effects

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

Acute toxicity

The classification criteria for this hazard class are not met.

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
graphite	7782-42-5	oral	LD50	>2,000 mg/kg	rat, female
graphite	7782-42-5	inhalation: dust/mist	LC50	>2,000 mg/m ³ /4h	rat

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:

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

CALCAST Carbon Composit

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

If inhaled:

inhalation of dust may cause respiratory irritation

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

No data available.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
calciumsilicate	1344-95-2	LL50	>1,000 mg/l	rainbow trout (<i>Oncorhynchus mykiss</i>)	96 h
calciumsilicate	1344-95-2	EL50	>10,000 mg/l	daphnia magna	48 h
graphite	7782-42-5	LC50	>100 mg/l	zebra fish (<i>Danio rerio</i>)	96 h
graphite	7782-42-5	EC50	>100 mg/l	daphnia magna	48 h
graphite	7782-42-5	ErC50	>100 mg/l	algae (<i>pseudokirchneriella subcapitata</i>)	72 h

Aquatic toxicity (chronic)

Test data are not available for the complete mixture.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
graphite	7782-42-5	NOEC	≥ 100 mg/l	algae (<i>pseudokirchneriella subcapitata</i>)	72 h
graphite	7782-42-5	LOEC	>100 mg/l	algae (<i>pseudokirchneriella subcapitata</i>)	72 h

CALCAST Carbon Composit

12.2 Persistence and degradability

Biodegradation

Data are not available.

Persistence

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Data are not 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

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	not subject to transport regulations
14.2	UN proper shipping name	-
14.3	Transport hazard class(es)	
	Class	-
14.4	Packing group	-
14.5	Environmental hazards	non-environmentally hazardous acc. to the dangerous goods regulations

CALCAST Carbon Composit

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

14.8 Information for each of the UN Model Regulations

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

Not subject to ADR, RID and ADN.

International Maritime Dangerous Goods Code (IMDG)

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR)

Not subject to ICAO-IATA.

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)

Seveso Directive

2012/18/EU (Seveso III)			
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes
	not assigned		

15.2 Chemical Safety Assessment

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Indication of changes (revised safety data sheet)		
Section	Former entry (text/value)	Actual entry (text/value)
1.1	Trade name: CALCAST® CC 60; 60-4; -8; -16, 155; -G4; -G8; -G16; -105 G8	Trade name: CALCAST Carbon Composit Calcast CC 60, 60-4, -8, -16 Calcast CC 155, -G4, -G8, -G16 Calcast CC 105-G8
3.1		Constituents: change in the listing (table)

CALCAST Carbon Composit

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 européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
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
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
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)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
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
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

CALCAST Carbon Composit

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 2015/830/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

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Disclaimer

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

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