Revision: 31/03/2020

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 07/04/2020

Version number 3

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

1.1 Product identifier

Trade name: Fibre cement panels

Trade names:

CARAT, CARAT HR, NOBILIS, NOBILIS HR, ZENOR, VINTAGO, INCORA, GRAVIAL, REFLEX, TEXIAL

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

Cement composite panels with or without water-based acrylic coating on front and rear side for cladding façades, roofs and in-door walls and ceilings

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Eternit (Switzerland) AG Eternitstrasse 3 CH-8867 Niederurnen

Phone: +41 (0) 55 617 1111 Fax: +41 (0) 55 617 1544

Further information obtainable from: msds@eternit.ch

1.4 Emergency telephone number:

Tox Info Suisse

Emergency number 24h: +41 (0) 44 251 51 51 (from abroad), Short-No. 145q (from Switzerland only)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

This product is an article, therefore, the product does not have to be classified and labelled according to the GHS-system. The classification below refers to the dust generated when processing the panels.



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

Additional Classification for colour BERNSTEIN:



GHS08 health hazard

Carc. 1A H350 May cause cancer.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

A safety data sheet is legally not required for articles. This safety data sheet was prepared for information purposes.

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

according to 1907/2006/EC, Article 31

Printing date 07/04/2020 Version number 3 Revision: 31/03/2020

Trade name: Fibre cement panels

(Contd. of page 1)

Hazard pictograms



For colour BERNSTEIN additionally



Signal word Danger

Hazard-determining components of labelling:

Cement, portland, chemicals

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H335 May cause respiratory irritation.

For colour BERNSTEIN additionally: H350 May cause cancer.

Precautionary statements

P201 Obtain special instructions before use.

P260 Do not breathe dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves / eye protection / face protection. P308+P313 IF exposed or concerned: Get medical advice/attention.

Precautionary statements for Colour RUBIN only

Avoid breathing dust/fume/gas/mist/vapours/spray. P261 P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves / eye protection / face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if P305+P351+P338

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

2.3 Other hazards

WARNING! MAY FORM COMBUSTIBLE DUST CONCENTRATIONS IN AIR (DURING PROCESSING)

Processing (drilling, cutting, sanding, etc.) of this product may lead to the release of combustible dust. You find information on minimizing dust concentrations in air and preventing a dust explosion in the following sections. Processing (drilling, cutting, sanding, etc.) of this product may lead to the release of quartz containing dust. Inhalation of dust containing quartz, in particular the fine (respirable size) dust fraction, in high concentrations or over prolonged periods of time can lead to lung disease (silicosis) and an increased risk of lung cancer.

This article contains max. 0.95% crystalline silica. Processing the panels may release respirable crystalline silica. (Additional Warning for Colour BERNSTEIN: This article contains max. 0.85% crystalline silica and ca. 0.15% cobalt titanate green spinel which is classified Carc. 1A H350. Processing the panels may release respirable components.)

Results of PBT and vPvB assessment

PBT: According to current knowledge, the product contains no PBT substance.

vPvB: According to current knowledge, the product contains no vPvB substance.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterization:

Description:

Cement composite panels based on cured portland cement, additives and cellulose fibre and organic synthetic fibres

In case of coated panels the percentage of the dried coating in the final panels is <1% w/w.

(Contd. on page 3)

according to 1907/2006/EC, Article 31



Printing date 07/04/2020

Version number 3

Trade name: Fibre cement panels

(Contd. of page 2)

Revision: 31/03/2020

Dangerous components:		
CAS: 65997-15-1	Cement, portland, chemicals	50-100%
EINECS:	Eye Dam. 1, H318; Skin Irrit. 2, H315; Skin Sens. 1, H317;	
266-043-4	STOT SE 3, H335	
Additional Dange	rous components in Colour BERNSTEIN:	
CAS: 68186-85-6	Cobalt Titanate Green Spinel	0.1-1%
EINECS:	& Carc. 1A, H350	
269-047-4		

SVHC

The product does not contain any substance of very high concern according to REACH in concentrations ≥ 0.1 % w/w.

Additional information:

This article contains max. 0.95% crystalline silica. Processing the panels may release respirable crystalline silica.

For Colour BERNSTEIN: This article contains max. 0.85% crystalline silica and ca. 0.15% cobalt titanate green spinel which is classified Carc. 1A H350. Processing the panels may release respirable components. For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information:

The information below only applies after exposure to dust generated from processing the article.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

Get medical advice/attention.

After skin contact:

Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

After eye contact:

Rinse cautiously with water for several minutes.

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

Immediately call a POISON CENTER/doctor.

After swallowing: Get medical advice/attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye damage.

May cause respiratory irritation.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

according to 1907/2006/EC, Article 31

SWISS Pearl_®

Printing date 07/04/2020

Version number 3

Trade name: Fibre cement panels

(Contd. of page 3)

Revision: 31/03/2020

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

The product itself does not burn, it is neither flammable nor explosive.

Fire classification according to ASTM E 136 non-combustible and EN

13501-1 non-combustible class A2-s1, d0.

For safety reasons unsuitable extinguishing agents:

No unsuitable extinguishing agent known.

Adapt the extinguishing measures to the surroundings.

5.2 Special hazards arising from the substance or mixture

Explosion: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3 Advice for firefighters

Protective equipment: No special measures required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

The information below only applies when the panels are processed mechanically.

Avoid formation of dust.

Avoid dispersal of dust in the air.

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up:

Moisten to avoid dust formation.

Ensure adequate ventilation.

Dispose contaminated material as waste according to item 13.

6.4 Reference to other sections

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

The information below only applies when the panels are processed mechanically.

Machining in accordance with specifications in technical product documentation.

Thorough dedusting.

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin, eyes and clothing.

Wash contaminated clothing before reuse.

Avoid breathing dust/fume/gas/mist/vapours/spray.

See further information in section 8.

Information about fire - and explosion protection:

Risk of dust explosion cannot be excluded.

Take measures to prevent dust explosion during/after processing (drilling, cutting, sanding, etc.) the panels.

(Contd. on page 5)

according to 1907/2006/EC, Article 31

SWISS Dearl®

Printing date 07/04/2020

Version number 3

(Contd. of page 4)

Revision: 31/03/2020

Trade name: Fibre cement panels

Keep away from all ignition sources including heat, sparks and flame.

Minimize dust generation and accumulation.

Minimize the escape of dust from process equipment or ventilation systems.

Use dust collection systems and filters.

Clean dust residues at regular intervals.

Only use vacuum cleaners approved for dust collection.

Control static electricity, including bonding of equipment to ground.

The information above is based on OSHA Safety and Health Information Bulletin on Combustible Dust in Industry: Preventing and Mitigating the Effects of Fire and Explosions, SHIB 07-31-2005, containing a summary of dust explosion control from NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids.

7.2 Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Store in dry conditions.

7.3 Specific end use(s): No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of technical facilities:

Use machining devices with low dust emissions (dust extraction).

When using handheld power saws (any blade diameter): Use saw equipped with integrated water delivery system that continuously feeds water to the blade. Operate and maintain tool in accordance with manufacturer's instructions to minimize dust emissions.

8.1 Control parameters

Ingredients with limit values that require monitoring at the workplace:

Follow good practice guide on crystalline silica:

Agreement on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products containing it (2006/C 279/02). The Annexes to this Agreement may be found on www.nepsi.eu. Annex I: Good Practice Guide on Workers Health Protection through the Good Handling and Use of Crystalline Silica and Products Containing it

http://www.nepsi.eu/good-practice-guide (available in all official EU languages)

65997-15-1 Cement, portland, chemicals

MAK value Long-term value: 5 e mg/m³ total dust

9004-34-6 Cellulose

MAK value Long-term value: 3 a mg/m³

14808-60-7 Quartz (SiO2)

MAK Long-term value: 0.15 a mg/m³

10043-35-3 boric acid

MAK Short-term value: 10 e mg/m³
Long-term value: 10 e mg/m³

68186-85-6 Cobalt Titanate Green Spinel (for colour BERNSTEIN)

MAK Long-term value: 0.05 e mg/m³

Additional information:

Concentration of 10043-35-3 (boric acid) in the product is <0.1%.

The lists valid during the making were used as basis.

(Contd. on page 6)

according to 1907/2006/EC, Article 31



Printing date 07/04/2020

Version number 3

(Contd. of page 5)

Revision: 31/03/2020

Trade name: Fibre cement panels

Legend for abbreviations:

- S: sensitizing
- P: provisory, value is in re-evaluation based on new scientific evidence
- C1a: Substances that are known human carcinogens. Classification as a carcinogen is made mainly on the basis of evidence in humans.
- SSc: No damage is expected to the unborn child if the workplace limit value is respected.
- SSb: Damage to the unborn child cannot be excluded even if the workplace limit value is respected.
- a: respirable dust
- e: inhalable dust

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Ensure good ventilation/exhaustion at the workplace.

Avoid contact with skin, eyes and clothing.

Wash contaminated clothing before reuse.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Respiratory protection:



Dust mask must be worn when handled with cutting devices.

Use dust mask according to EN 149 with filter class FFP3.

Respiratory protection must be compliant with the specifications of Directive 89/686/EEC and be in accordance with the EN standards resulting thereof.

Protection of hands:

When panels are handled with cutting devices:

Wear gloves for the protection against mechanical hazards according to EN 388.



Protective gloves

Material of gloves

Protective gloves must be compliant with the specifications of EU Directive 89/686/EEC and be in accordance with the standard EN374. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

Eye protection:

Safety goggles have to be worn while using cutting devices.



Tightly sealed goggles

Protective goggles must be compliant with the specifications of Directive 89/686 / EEC and be in accordance with the standard EN166.

Limitation and supervision of exposure into the environment: No special measures required.

Safety data sheet according to 1907/2006/EC, Article 31



Printing date 07/04/2020 Version number 3 Revision: 31/03/2020

Trade name: Fibre cement panels

(Contd. of page 6)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties				
General Information				
Appearance:				
Form:	Solid			
Colour:	According to product specification			
Odour:	Characteristic			
Odour threshold:	Not determined			
pH-value:	10-14			
Change in condition				
Melting point/freezing point:	Not determined.			
Initial boiling point and boiling range:	Not determined.			
Flash point:	Not applicable.			
Flammability (solid, gas):	Product is not flammable.			
Ignition temperature:	Not applicable.			
Decomposition temperature:	Not determined.			
Auto-ignition temperature:	Product is not self-igniting.			
Explosive properties:	Product itself does not present an explosion hazard. Dust classification: Based on a Explosion Severity Test per ASTM E1226 (Report No.: FAI16-0744) with a dust mixture generated from CNC Fabrication / Exterior Wall Panels classified as St1 class dust (weak explosive). Details on tested material: mean particle size: 32 micrometers, 96% <75 micrometers, moisture content: 4.6%. Details on results: Pmax (bar): 7.5 +/-10%; dP/dt max (bar/s): 316 +/-20%, Kst (bar.m/s): 86 +/-20%. The result is sample specific. Dust combustion properties depend on varying characteristics of the material such as composition of the dust mixture, particle size or moisture content.			
Explosion limits:				
Lower:	Not determined.			
Upper:	Not determined.			
Oxidising properties	Not determined.			
Vapour pressure:	Not applicable.			
Density:	Not determined.			
Relative density	Not determined.			
Vapour density Evaporation rate	Not applicable. Not applicable.			
Solubility in / Miscibility with				
•	Insoluble.			
water:				

according to 1907/2006/EC, Article 31



Version number 3 Printing date 07/04/2020 Revision: 31/03/2020

Trade name: Fiber cement panels

		(Contd. of page
Partition coefficient:		
n-octanol/water:	Not applicable.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
VOC (EC)	Not determined.	
9.2 Other Information	No further relevant information available.	

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.
- **10.2 Chemical stability** Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

10.3 Possibility of hazardous reactions No dangerous reactions known.

10.4 Conditions to avoid:

During mechanical processing:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

- 10.5 Incompatible materials No further relevant information available.
- 10.6 Hazardous decomposition products None.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

The information below only applies after exposure to dust generated from processing the article.

Acute toxicity Based on the ingredients not classified as acute toxic.

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/irritation

Causes serious eve damage.

Respiratory or skin sensitisation

Contains Cement, portland, chemicals. May produce an allergic reaction.

May cause an allergic skin reaction.

Additional toxicological information:

Dust can be irritating to skin, eye and the respiratory tract and may be sensitizing.

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

Carcinogenicity

Processing (drilling, cutting, sanding, etc.) of this product may lead to the release of quartz containing dust. Inhalation of dust containing quartz, in particular the fine (respirable size) dust fraction, in high concentrations or over prolonged periods of time can lead to lung disease (silicosis) and an increased risk of lung cancer. Based on available data the classification criteria are not met (calculation method for mixtures).

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

STOT-single exposure

May cause respiratory irritation.

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.

(Contd. on page 9)

according to 1907/2006/EC, Article 31



Printing date 07/04/2020

Version number 3

(Contd. of page 8)

Revision: 31/03/2020

Trade name: Fiber cement panels

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Based on the ingredients not classified as harmful for the environment.

- 12.2 Persistence and degradability Non degradable.
- 12.3 Bioaccumulative potential Not applicable.
- **12.4 Mobility in soil** No further relevant information available.
- 12.5 Results of PBT and vPvB assessment

PBT: According to current knowledge, the product contains no PBT substance.

vPvB: According to current knowledge, the product contains no vPvB substance.

12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation:

Residues of the fiber cement panels can be recycled at a cement plant if in accordance with local regulation.

European waste catalogue		
HP 4	Irritant - skin irritation and eye damage	
HP 5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity	
HP 13	Sensitising	

SECTION 14: Transport information

14.1 UN-Number	
ADR/ADN, ADN, IMDG, IATA	Void
14.2 UN proper shipping name	
ADR/ADN, ADN, IMDG, IATA	Void
14.3 Transport hazard class(es)	
ADR/ADN, ADN, IMDG, IATA	
Class	Void
14.4 Packing group	
ADR/ADN, IMDG, IATA	Void
14.5 Environmental hazards:	
Marine pollutant:	No
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of	
Marpol and the IBC Code	Not applicable.
Transport/Additional information:	Not dangerous according to the above specifications.
UN "Model Regulation":	Void

(Contd. on page 10)

according to 1907/2006/EC, Article 31

SWISS Pearl_®

Printing date 07/04/2020

Version number 3

(Contd. of page 9)

Revision: 31/03/2020

Trade name: Fiber cement panels

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 None of the ingredients is listed.

LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

The product does not contain any of the substances listed in concentrations \geq 0.1 % w/w.

REGULATION (EC) No 1907/2006 ANNEX XVII No restrictions known.

National regulations: No special information available.

Information about limitation of use:

COUNCIL DIRECTIVE 94/33/EC of 22 June 1994 on the protection of young people at work:

Employment restrictions concerning juveniles must be observed.

Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous to water. (Germany) Substances of very high concern (SVHC) according to REACH, Article 57

The product does not contain any substance of very high concern according to REACH in concentrations $\geq 0.1 \%$ w/w.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

The data and information given in this product information sheet are based on the current state of our knowledge at the publishing date indicated in this product information sheet. The product information sheet shall give you indications for the safe handling, storage and use, however the information included herein is not intended to be all-inclusive. The data and information can not be transferred to other products or other uses as the one declared in this product information sheet. The data and information in this product information sheet describe the safety requirements, but they do not represent any product specifications.

For detailled information on use please refer to the official technical documentation for this product.

Relevant phrases

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H335 May cause respiratory irritation.

H350 May cause cancer. (for colour BERNSTEIN only)

Department issuing SDS:

R&D, Eternit (Switzerland) AG

Phone: +41 55 617 15 41 Fax: +41 55 617 12 23

E-mail: info@eternit.ch

Abbreviations and acronyms:

ADR: Accord européen sur le transport 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

ELINCS: European List of Notified Chemical Substances

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

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation - Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3