

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

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

1.1. Product identifier

Product Name H+H Porebetonpuds

Other means of identification

Unique Formula Identifier (UFI) .
Pure substance/mixture Mixture

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

Recommended use Hydraulic Cement, Mortar, Grout and Concrete

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company Name
 H+H Nordics A/S
 Skanderborgvej 234
 8260
 Viby J
 Denmark
 Tel: +45 70240050

E-mail address teknik@hplush.dk

1.4. Emergency telephone number

Emergency Telephone 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin irritation	Category 2 - (H315)
Serious eye damage	Category 1 - (H318)
Specific target organ toxicity (single exposure)	Category 3 - (H335)
Category 3 Target organ effects: Respiratory irritation.	

2.2. Label elements

Contains Cement, portland, chemicals (Chromium VI reduced); Calcium hydroxide

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02



Signal word
Danger

Hazard statements
H315 - Causes skin irritation.
H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.

Precautionary Statements - EU (§28, 1272/2008)

P102 - Keep out of reach of children
P271 - Use only outdoors or in a well-ventilated area
P280 - Wear protective gloves, eye protection and face protection
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER or doctor
P501 - Dispose of contents/containers in accordance with local regulations

2.3. Other hazards

Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of developing lung disease. Product dust may be irritating to eyes, skin and respiratory system. Repeated exposure may cause skin dryness or cracking. When cement reacts with water a strong alkaline solution is produced. Prolonged contact with wet cement or wet concrete may cause serious burns because they develop without pain being felt e.g. when kneeling in wet cement even when wearing trousers.

PBT & vPvB

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	Notes
Quartz 14808-60-7	40 - <80	[5]	238-878-4	[B]	-	-	-	-
Cement, portland, chemicals (Chromium VI reduced) 65997-15-1	10 - <20	[5]	266-043-4	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335)	-	-	-	-

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

not classified UNKNOWN	5 - <10	No data available	-	No data available	-	-	-	-
Dolomite 16389-88-1	5 - <10	[5]	240-440-2	No data available	-	-	-	-
Calcium hydroxide 1305-62-0	1 - <5	01-2119475151 -45-XXXX	215-137-3	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335)	-	-	-	-
not classified UNKNOWN	1 - <2.5	No data available	-	No data available	-	-	-	-
Titanium dioxide 13463-67-7	0.1- <1	01-2119489379 -17-XXXX	236-675-5 (022-006-00-2)	[C]	-	-	-	V,W,10
Flue dust, Cement Portland 68475-76-3	0.1- <1	01-2119486767 -17-XXXX	270-659-9	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335)	-	-	-	-
Calcium diformate 544-17-2	0.1- <1	01-2119486476 -24-XXXX	208-863-7	Eye Dam. 1 (H318)	-	-	-	-
Cellulose hydroxypropyl methyl ether 9004-65-3	0.1 - <0.3	[7]	-	No data available	-	-	-	-
Cellulose 9004-34-6	0.05 - <0.1	[5]	232-674-9	No data available	-	-	-	-
Modified Carbohydrates - cas confidential (Dow) UNKNOWN	0.05 - <0.1	No data available	-	No data available	-	-	-	-
Silane, triethoxyoctyl- 2943-75-1	0.05 - <0.1	01-2119972313 -39-XXXX	220-941-2	Skin Irrit. 2 (H315) Aquatic Chronic 2 (H411)	-	1	1	-
Calcium disulphamate 13770-92-8	0.036 - < 0.05	01-2120762833 -48-XXXX	237-399-8	Eye Irrit. 2 (H319)	-	-	-	-
Powder based on inorganic salts, modified, polymer UNKNOWN	0.036 - < 0.05	No data available	-	No data available	-	-	-	-
Inorganic salts UNKNOWN	0.036 - < 0.05	No data available	-	Eye Irrit. 2 (H319)	-	-	-	-
Carbonic acid, calcium salt (1:1) 471-34-1	0.01 < 0.036	01-2119486795 -18-XXXX	207-439-9	[C]	-	-	-	-
not classified UNKNOWN	0.01 < 0.036	No data available	-	No data available	-	-	-	-
Propylidynetrimetha nol 77-99-6	0.0025 - <0.01	01-2119486799 -10-xxxx	201-074-9	Repr. 2 (H361fd)	-	-	-	-
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts 68439-57-6	0.0015 - < 0.0025	01-2119513401 -57-XXXX	270-407-8	Skin Irrit. 2 (H315) Eye Dam. 1 (H318)	Eye Dam. 1 :: C>38% Skin Irrit. 2 :: C>38% Eye Irrit. 2 :: 5%<C<=38% Skin Irrit. 2 :: C>=5%	-	-	-
not classified UNKNOWN	<0.0015	No data available	-	No data available	-	-	-	-

NOTE [5] - This substance is exempted from registration according to the provisions of Article 2(7)(a) and Annex V of REACH Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes

[B] - Substance with a Community workplace exposure limit

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

[C] - Components with occupational exposure limits and/or biological occupational exposure limits requiring monitoring
Note V - If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.
Note W - It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation.
Note 10 - The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	EC No (EU Index No)	CAS No.	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Quartz	238-878-4	14808-60-7	-	-	-	-	-
Cement, portland, chemicals (Chromium VI reduced)	266-043-4	65997-15-1	-	-	-	-	-
Dolomite	240-440-2	16389-88-1	-	-	-	-	-
Calcium hydroxide	215-137-3	1305-62-0	-	-	-	-	-
Titanium dioxide	236-675-5 (022-006-00-2)	13463-67-7	-	-	-	-	-
Flue dust, Cement Portland	270-659-9	68475-76-3	-	-	-	-	-
Calcium diformate	208-863-7	544-17-2	-	-	-	-	-
Cellulose	232-674-9	9004-34-6	-	-	-	-	-
Silane, triethoxyoctyl-	220-941-2	2943-75-1	-	-	-	-	-
Calcium disulphamate	237-399-8	13770-92-8	-	-	-	-	-
Carbonic acid, calcium salt (1:1)	207-439-9	471-34-1	-	-	3.003	-	-
Propylidynetrimethanol	201-074-9	77-99-6	-	-	-	-	-
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	270-407-8	68439-57-6	-	740.74	-	-	-

This product does not contain candidate substances of very high concern at a concentration ≥0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice If medical advice is needed, have product container or label at hand. Take a copy of the Safety Data Sheet when going for medical treatment.

Inhalation Remove to fresh air. Get medical attention immediately if symptoms occur. IF exposed or concerned: Get medical advice/attention.

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Eye contact	Do not rub affected area. Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult an ophthalmologist.
Skin contact	Brush off loose particles from skin. Remove material from skin immediately. Take off contaminated clothing and wash it before reuse.
Ingestion	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms	Burning sensation. Dust irritates eyes and air passages.
Effects of Exposure	No information available.

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

Note to doctors	Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	Full water jet. Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	No information available.
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5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.
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SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid generation of dust. Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required.
Other information	Refer to protective measures listed in Sections 7 and 8.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Prevent product from entering drains. Do not allow to enter into soil/subsoil.
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6.3. Methods and material for containment and cleaning up

Methods for containment	Cover powder spill with plastic sheet or tarp to minimise spreading and keep powder dry.
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SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Prevent dust cloud.

Methods for cleaning up

Do not dry sweep dust. Wet dust with water before sweeping or use a vacuum to collect dust. Use appropriate personal protective equipment (PPE). Carefully shovel or sweep up spilled material and place in suitable container. Avoid generating dust.

Prevention of secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections

See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Ensure adequate ventilation. Avoid generation of dust. Use personal protection equipment. Take off contaminated clothing and wash it before reuse.

General hygiene considerations

Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep out of the reach of children. Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Protect from moisture.

7.3. Specific end use(s)

Specific use(s)

Hydraulic Cement, Mortar, Grout and Concrete.

Risk Management Methods (RMM)

The information required is contained in this Safety Data Sheet.

Other information

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Only European Community Occupational Exposure Limits will be shown in this document. Please refer to regional SDS for further information.

Chemical name	European Union
Quartz 14808-60-7	TWA: 0.1 mg/m ³
Calcium hydroxide 1305-62-0	TWA: 1 mg/m ³ respirable fraction STEL: 4 mg/m ³ respirable fraction

Derived No Effect Level (DNEL)

No information available

Derived No Effect Level (DNEL)

Quartz (14808-60-7)

Calcium hydroxide (1305-62-0)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Short term Local health effects	Inhalation	4 mg/m ³	

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

worker Long term Local health effects	Inhalation	1 mg/m ³	
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Titanium dioxide (13463-67-7)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m ³	

Calcium diformate (544-17-2)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Short term Systemic health effects	Inhalation	337 mg/m ³	
worker Long term Systemic health effects	Inhalation	337 mg/m ³	
worker Short term Local health effects	Dermal	16.7	
worker Short term Systemic health effects	Dermal	4780 mg/kg bw/d	
worker Long term Local health effects	Dermal	16.7 mg/cm ²	
worker Long term Systemic health effects	Dermal	4780 mg/kg bw/d	

Propylidynetrimehtanol (77-99-6)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Inhalation	3.3 mg/m ³	
worker Long term Systemic health effects	Dermal	0.94 mg/kg bw/d	

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Dermal	2158 mg/kg bw/d	
worker Long term Systemic health effects	Inhalation	152 mg/m ³	

Derived No Effect Level (DNEL)

Calcium hydroxide (1305-62-0)

Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Short term	Inhalation	4 mg/m ³	

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Local health effects			
Consumer	Inhalation	1 mg/m ³	
Long term			
Local health effects			

Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer	Oral	700 mg/kg bw/d	
Long term			
Systemic health effects			

Calcium diformate (544-17-2)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer	Oral	23.9 mg/kg bw/d	
Long term			
Systemic health effects			
Consumer	Dermal	8.3 mg/cm ²	
Short term			
Local health effects			
Consumer	Dermal	2390 mg/kg bw/d	
Short term			
Systemic health effects			
Consumer	Dermal	8.3 mg/cm ²	
Long term			
Local health effects			
Consumer	Dermal	2390 mg/kg bw/d	
Long term			
Systemic health effects			
Consumer	Inhalation	83.2 mg/m ³	
Short term			
Systemic health effects			
Consumer	Inhalation	83.2 mg/m ³	
Long term			
Systemic health effects			

Propylidynetrimethanol (77-99-6)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer	Inhalation	0.58 mg/m ³	
Long term			
Systemic health effects			
Consumer	Dermal	0.34 mg/kg bw/d	
Long term			
Systemic health effects			
Consumer	Oral	0.34 mg/kg bw/d	
Long term			
Systemic health effects			

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer	Dermal	1295 mg/kg bw/d	
Long term			
Systemic health effects			
Consumer	Oral	12,95 mg/kg bw/d	
Long term			
Systemic health effects			
Consumer	Inhalation	45 mg/m ³	

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Long term Systemic health effects			
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Predicted No Effect Concentration (PNEC) No information available.
(PNEC)

Predicted No Effect Concentration (PNEC)	
Calcium hydroxide (1305-62-0)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.49 mg/l
Marine water	0.32 mg/l
Sewage treatment plant	3 mg/l
Soil	1080 mg/kg dry weight

Titanium dioxide (13463-67-7)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Marine water	0.0184 mg/l
Freshwater sediment	1000 mg/kg
Freshwater	0.184 mg/l
Marine sediment	100 mg/kg
Soil	100 mg/kg
Microorganisms in sewage treatment	100 mg/l
Freshwater - intermittent	0.193 mg/l

Calcium diformate (544-17-2)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	2 mg/l
Freshwater - intermittent	10
Freshwater sediment	13.4 mg/kg dry weight
Marine water	0.2
Marine sediment	1.34

Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts (68439-57-6)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.024 mg/l
Marine water	0.0024 mg/l
Freshwater sediment	0.767 mg/kg
Marine sediment	0.0767
Soil	1.21 mg/kg
Sewage treatment plant	4 mg/l
Freshwater - intermittent	0.0197 mg/l

8.2. Exposure controls

Engineering controls

Ensure adequate ventilation, especially in confined areas. Vapours/aerosols must be exhausted directly at the point of origin.

Personal protective equipment

Eye/face protection

Hand protection

Skin and body protection

Respiratory protection

Recommended filter type:

Use eye protection according to EN 166, designed to protect against powders and dusts.
Gloves made of plastic or rubber. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Gloves must conform to standard EN 374.
Suitable protective clothing.
None under normal use conditions. In case of inadequate ventilation wear respiratory protection.
Wear a respirator conforming to EN 140 with Type P2/P3 filter or better.

Environmental exposure controls Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Physical state Solid
Appearance Powder
Colour No information available
Odour Odourless.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Melting point / freezing point	Not applicable .	None known
Initial boiling point and boiling range	Not applicable .	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	Not applicable .	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	No data available	None known.
pH (as aqueous solution)	11 - 13	None known
Kinematic viscosity	Not applicable .	None known
Dynamic viscosity	Not applicable .	
Water solubility	Miscible in water. Cement based products react and solidify in contact with water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

Solid content (%) 100
Softening point Not relevant
VOC content No data available

9.2.1. Information with regards to physical hazard classes
Not applicable

9.2.2. Other safety characteristics
No information available Not applicable .

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Product cures with moisture.

10.2. Chemical stability

Stability Stable under recommended storage conditions.

Explosion data

Sensitivity to mechanical impact None.

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Product cures with moisture. Protect from moisture.

10.5. Incompatible materials

Incompatible materials Strong acids. Strong bases. Strong oxidising agents. Acids. Aluminium.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions. Stable under recommended storage conditions.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract.
Eye contact	Specific test data for the substance or mixture is not available. Causes serious eye damage. May cause irreversible damage to eyes.
Skin contact	Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).
Ingestion	Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Redness. Burning. May cause blindness. May cause redness and tearing of the eyes.

Acute toxicity

Numerical measures of toxicity

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Quartz	>2000 mg/kg (Rattus)	-	-
Cement, portland, chemicals (Chromium VI reduced)	-	>2000 Kg/mg (Lapin)	>5 g/m ³ (Rattus)
Calcium hydroxide	=7340 mg/kg (Rattus)	LD50 > 2500 mg/kg bw (OECD 402, <i>Oryctolagus cuniculus</i>)	> 6.04 mg/L (Rat) 4 h
Titanium dioxide	>10000 mg/kg (Rattus)	LD50 > 5000 mg/Kg	= 5.09 mg/L (Rattus) 4 h
Flue dust, Cement Portland	-	LD5 >= 2000 mg/kg (Rat) OECD 402	> 6.04 mg/L (Rat) 4 h

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Calcium diformate	=2650 mg/kg (Rattus)	LD50 > 2000 mg/kg (Rattus) OECD 402	-
Cellulose	>5 g/kg (Rattus)	> 2 g/kg (Oryctolagus cuniculus) > 2000 mg/kg (Oryctolagus cuniculus)	>5800 mg/m ³ (Rattus) 4 h
Silane, triethoxyoctyl-	=10060 µL/kg (Rattus)	= 6730 mg/kg (Oryctolagus cuniculus)	> 22 ppm (Rattus) 4 h
Calcium disulphamate	LD50 > 2500 mg/kg bw (Rattus) OECD 423	LD50 > 2000 mg/kg bw (Rattus) OECD 402	-
Carbonic acid, calcium salt (1:1)	LD50 > 2000 mg/kg (Rattus) OECD 420	LD50 >2000 mg/kg (Rattus) OECD 402	LC50 (4h) >3mg/ml (Rattus)
Propylidynetrimethanol	=14700 mg/kg (Rattus)	>10000 mg/Kg (Oryctolagus cuniculus)	>0.29 mg/L (Rattus) 4 h
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	=2220 mg/kg (Rattus)	> 740 mg/kg (Oryctolagus cuniculus)	> 52 mg/L (Rat) 4 h

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

Skin corrosion/irritation Causes skin irritation.

Calcium hydroxide (1305-62-0)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal			irritant

Titanium dioxide (13463-67-7)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 404: Acute Dermal Irritation/Corrosion	Rabbit	Dermal			Non-irritant

Serious eye damage/eye irritation Causes serious eye damage.

Calcium hydroxide (1305-62-0)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye			Eye Damage

Titanium dioxide (13463-67-7)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
OECD Test No. 405: Acute Eye Irritation/Corrosion	Rabbit	Eye			Non-irritant

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.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Chemical name	European Union
Titanium dioxide	Carc. 2

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

Propylidynetrimethanol (77-99-6)		
Method	Species	Results
OECD Test No. 422: Combined Repeated Dose Toxicity Study with the Reproduction/Developmental Toxicity Screening Test	Rat	NOAEL 800 mg/kg bw/d
OECD Test No. 414: Pre-natal Development Toxicity Study	Rat	LOAEL 100 mg/kg bw/d

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.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Calcium hydroxide 1305-62-0	EC50 = 184.57 g/ml (72Hr)	LC50: =160mg/L (96h, Gambusia affinis)	-	EC50 = 49.1 g/ml (48 hr)		
Titanium dioxide 13463-67-7	LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203	-	-	-		
Calcium diformate 544-17-2	RC50 (72h) > 1000 mg/l (Pseudokirchnerella subcapitata)	LC50: >=1000mg/L (96h, Brachydanio rerio)	-	EC50 (48h) > 1000 mg/l (Daphnia magna) EPA-660/3-75-009		
Silane, triethoxyoctyl- 2943-75-1	-	LC50: >0.055mg/L (96h,	-	-	1	1

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

		Oncorhynchus mykiss)				
Calcium disulphamate 13770-92-8	EC50 (72h) > 200 mg/L (Pseudokirchneriella subcapitata)	LC50 (96h) > 100 mg/l (Oncorhynchus mykiss) OECD 203	-	EC50 (48h) > 100 mg/L (Daphnia magna)		
Carbonic acid, calcium salt (1:1) 471-34-1	IC50 72H Algae >1000 mg/l	CL50 96H >1000 mg/l	-	EC50 48H Daphnia >1000 mg/l		
Propylidynetrimethanol 77-99-6	-	LC50: =21700mg/L (48h, Cyprinodon)	-	EC50: 10330 - 16360mg/L (48h, Daphnia magna) EC50: =13000mg/L (48h, Daphnia species)		
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts 68439-57-6	-	LC50: =12.2mg/L (96h, Brachydanio rerio) LC50: 1.0 - 10.0mg/L (96h, Brachydanio rerio)	-	-		

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Chemical name	Partition coefficient
Silane, triethoxyoctyl-	6.41
Propylidynetrimethanol	-0.47
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	-1.3

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment The product does not contain any substance(s) classified as PBT or vPvB above the threshold of declaration.

Chemical name	PBT and vPvB assessment
Calcium hydroxide	The substance is not PBT / vPvB
Titanium dioxide	The substance is not PBT / vPvB
Flue dust, Cement Portland	PBT assessment does not apply
Calcium diformate	The substance is not PBT / vPvB
Silane, triethoxyoctyl-	The substance is not PBT / vPvB
Calcium disulphamate	PBT assessment does not apply
Carbonic acid, calcium salt (1:1)	The substance is not PBT / vPvB
Propylidynetrimethanol	The substance is not PBT / vPvB
Sulfonic acids, C14-16-alkane hydroxy and C14-16-alkene, sodium salts	The substance is not PBT / vPvB

12.6. Endocrine disrupting properties

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Endocrine disrupting properties No information available.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Do not reuse empty containers.
European Waste Catalogue	16 03 03* inorganic wastes containing hazardous substances 17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03
Other information	Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

IMDG

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Marine pollutant	NP
14.6 Special precautions for user	
Special Provisions	None
14.7 Maritime transport in bulk according to IMO instruments	
Transport in bulk according to Annex II of MARPOL and the IBC Code	Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing group	Not regulated
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	None

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

European Union

Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Chemical name	CAS No.	Restricted substance per REACH Annex XVII
Cement, portland, chemicals (Chromium VI reduced)	65997-15-1	Use restricted. See entry 47.

47 where product supplied with reducing agent the packaging must be marked with the storage conditions and storage period appropriate to maintaining the activity of the reducing agent to keep the content of soluble chromium VI below 2mg/Kg

Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Export Notification requirements

This product does not contain substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals above the level that triggers a labeling obligation under Regulation (EC) No 1272/2008. Therefore this product is not subject to prior informed consent notification.

Ozone-depleting substances (ODS) Regulation (EU) 2024/590

Not applicable

Persistent Organic Pollutants

Not applicable

REGULATION (EU) 2019/1148 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 June 2019 on the marketing and use of explosives precursors

Not applicable

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Quartz 14808-60-7	RG 25
Cement, portland, chemicals (Chromium VI reduced) 65997-15-1	RG 8, RG 10
Cellulose 9004-34-6	RG 66

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV

No flammable liquids in accordance with BetrSichV

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

Water hazard class (WGK) slightly hazardous to water (WGK 1)

TRGS - 510 Storage Class Storage Class 13 : Non-combustible solids
TA Luft (German Air Pollution Control Regulation)

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)

Chemical name	Netherlands - List of Carcinogens
Quartz 14808-60-7	Present (respirable dust, crystalline)

Sweden

Occupational exposure limits AFS 2018:1

Swedish Work Environment Authority's Statute (AFS 2015:2) QUARTZ AFS 2015:2

Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product. AFS 2012:3

Denmark

Registration number(s) (P-no.) 4575822

MAL-Code 00-4

Young people under the age of 18 may not professionally use or be exposed to the product. However, young people over the age of 15 are exempt from this rule if the product is included as a necessary part of an education
AT-Guide C.0.1 August 2007: Limit values for substances and materials

Norway

Registration number(s) (PRN-no.) 302880

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of any hazard and/or precautionary statements referred to under Sections 2-15

H315 - Causes skin irritation

H318 - Causes serious eye damage

H335 - May cause respiratory irritation

Notes relating to the identification, classification and labelling of substances

Note V - If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≥ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied

Note W - It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung. This note aims to describe the particular toxicity of the substance; it does not constitute a criterion for classification according to this Regulation

Notes relating to the classification and labelling of mixtures

Note 10 - The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm

SVHC: Substances of Very High Concern for Authorisation:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT RE: Specific target organ toxicity - Repeated exposure

SAFETY DATA SHEET

H+H Porebetonpuds
Supercedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

STOT SE: Specific target organ toxicity - Single exposure
EWC: European Waste Catalogue
LOW: List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA: International Air Transport Association
ICAO: ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG: International Maritime Dangerous Goods
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

Legend SECTION 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
AGW	Occupational exposure limit value	BGW	Biological limit value
Ceiling	Maximum limit value	Sk*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	Calculation method
Serious eye damage/eye irritation	Calculation method
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS

European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
Environmental Protection Agency
Acute Exposure Guideline Level(s) (AEGl(s))
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
NIOSH (National Institute for Occupational Safety and Health)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set

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Revision date 12-Dec-2024

Training Advice No information available

Further information No information available

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Regulation (EC) No. 1907/2006 as amended by Regulation (EU) No. 2020/878, and Regulation (EC) No. 1272/2008

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at

SAFETY DATA SHEET

H+H Porebetonpuds
Supersedes date 06-Nov-2024

Revision date 12-Dec-2024
Revision Number 1.02

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End of Safety Data Sheet