SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008
This SDS is for generic information purposes and does not reflect required country specific information for OEL

H+H Udfyldningsmørtel Hvid **Revision date** 13-Dec-2024

Supercedes date 07-Nov-2024 **Revision Number** 1.01

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

1.1. Product identifier

Product Name H+H Udfyldningsmørtel Hvid

Other means of identification

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

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)
P101 - If medical advice is needed, have product container or label at hand
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)	10 - <20	[5]	266-043-4	Skin Irrit. 2 (H315) Eye Dam. 1 (H318) STOT SE 3 (H335)	-	-	-	-

65997-15-1								
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)	-	-	-	-
Titanium dioxide 13463-67-7	0.1- <1	01-2119489379 -17-XXXX	236-675-5 (022-006-00-2)	[C]	-	-	-	V,W,10

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
[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	-	-	-	-	-
Calcium hydroxide	215-137-3	1305-62-0	-	-	-	-	-
Titanium dioxide	236-675-5 (022-006-00-2)	13463-67-7	-	-	-	-	-

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.

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. Causes serious eye damage. Irritating to skin. Inhalation of dust in high concentration may cause irritation of respiratory system. Frequent inhalation of large quantities of cement dust over a long period of time increases the risk of developing lung disease. 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.
Effects of Exposure	No information available.

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

Note to doctors	Treat symptomatically.

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.

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.

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.

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. 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/m³
Calcium hydroxide 1305-62-0	TWA: 1 mg/m³ respirable fraction STEL: 4 mg/m³ 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/m³	
worker Long term Local health effects	Inhalation	1 mg/m³	

Titanium dioxide (13463-67-7)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Local health effects	Inhalation	10 mg/m³	

Derived No Effect Level (DNEL)			
Calcium hydroxide (1305-62-0)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Short term Local health effects	Inhalation	4 mg/m³	
Consumer Long term Local health effects	Inhalation	1 mg/m³	

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

Predicted No Effect Concentration (PNEC) No information available.

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

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	Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.
Hand protection	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.
Skin and body protection	Suitable protective clothing.
Respiratory protection	None under normal use conditions. In case of inadequate ventilation wear respiratory protection.
Recommended filter type:	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

Physical state	Solid
Appearance	Powder
Colour	White
Odour	Odourless.

Property	Values	Remarks • Method
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. Keep away from Incompatible materials.

Explosion data

Sensitivity to mechanical impact None.
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

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) >2000 mg/kg
ATEmix (dermal) >2000 mg/kg
ATEmix (inhalation-gas) >20000 ppm
ATEmix (inhalation-dust/mist) >5 mg/l
ATEmix (inhalation-vapour) >20 mg/l

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/m³ (Rattus)
Calcium hydroxide	=7340 mg/kg (Rattus)	LD50 > 2500 mg/kg bw (OECD 402, Oryctolagus cuniculus)	> 6.04 mg/L (Rat) 4 h
Titanium dioxide	>10000 mg/kg (Rattus)	LD50 > 5000 mg/Kg	= 5.09 mg/L (Rattus) 4 h

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

Skin corrosion/irritation Classification based on data available for ingredients. 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 Classification based on data available for ingredients. Causes burns. 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.

Chemical name	European Union
Titanium dioxide	Carc. 2

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.

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	-	-	-		

12.2. Persistence and degradability

Persistence and degradability No information available.

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

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

12.6. Endocrine disrupting properties

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

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 >=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

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV
No flammable liquids in accordance with BetrSichV

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.) 4575857
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.) No information available

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
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

Prepared By	Product Safety & Regulatory Affairs
Revision date	13-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 the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet