

# Abrasive Products

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 09/11/2019

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Version: 1.2

### SECTION 1: Identification

#### 1.1. Identification

Product form	Article
Trade name	Abrasive Products
Product code	BU ET&A

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

Use of the substance/mixture	Milling, grinding and similar activities
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#### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b> Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway TX 75024 Plano - USA T +1 9724035800 1-800-879-8000 toll free - F +1 918 254 0522	<b>Department issuing data specification sheet</b> Hilti Entwicklungsgesellschaft mbH Hiltistraße 6 86916 Kaufering - Deutschland T +49 8191 906876 <a href="mailto:anchor.hse@hilti.com">anchor.hse@hilti.com</a>
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#### 1.4. Emergency telephone number

Emergency number	Chem-Trec Tel.: 1 800 424 9300 (USA, PR, Virgin Islands, Canada) Tel.: 703 527 3887 (Other countries) +1 918 8723000 1-800-879-8000 toll free
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### SECTION 2: Hazards identification

A safety data sheet is not required for this product under Article 31 of REACH. This Product Safety Information Sheet has been created on a voluntary basis

#### 2.1. Classification of the substance or mixture

**GHS-US classification**  
Not classified

#### 2.2. Label elements

**GHS US labelling**  
No labelling applicable

#### 2.3. Other hazards

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

Not applicable

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

Not applicable

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### 3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	(CAS-No.) 1344-28-1	<= 80	Not classified
silicon carbide	(CAS-No.) 409-21-2	<= 75	Not classified
zirconium dioxide	(CAS-No.) 1314-23-4	<= 75	Resp. Sens. 1, H334 Skin Sens. 1, H317
pyrite (FeS <sub>2</sub> )	(CAS-No.) 1309-36-0	<= 20	Eye Irrit. 2A, H319
calcium oxide	(CAS-No.) 1305-78-8	<= 10	Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335
potassiumtetrafluoroborate	(CAS-No.) 14075-53-7	<= 10	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
calcium fluoride	(CAS-No.) 7789-75-5	<= 10	Not classified
barium sulfate	(CAS-No.) 7727-43-7	<= 10	Not classified
Calcium Carbonate	(CAS-No.) 471-34-1	<= 10	Not classified
potassium sulfate	(CAS-No.) 7778-80-5	<= 10	Not classified
graphite	(CAS-No.) 7782-42-5	<= 5	Not classified
trisodium hexafluoroaluminate	(CAS-No.) 13775-53-6	<= 5	Acute Tox. 4 (Inhalation), H332 STOT RE 1, H372 Aquatic Chronic 2, H411
fiberglass	(CAS-No.) 65997-17-3	<= 5	Not classified
cryolite	(CAS-No.) 15096-52-3	<= 0.1	Acute Tox. 4 (Inhalation), H332 STOT RE 1, H372 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation	Remove person to fresh air and keep comfortable for breathing. When symptoms occur: go into open air and ventilate suspected area.
First-aid measures after skin contact	Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse eyes with water as a precaution. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	Rinse mouth.

### 4.2. Most important symptoms and effects (acute and delayed)

Potential adverse human health effects and symptoms	Irritation: may cause irritation to the respiratory system.
Symptoms/effects after inhalation	May cause respiratory irritation.
Symptoms/effects after eye contact	May cause severe irritation.

### 4.3. Immediate medical attention and special treatment, if necessary

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	Water. Sand. Foam. Carbon dioxide.
Unsuitable extinguishing media	Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard	Not flammable.
Reactivity	The product is non-reactive under normal conditions of use, storage and transport. Product is not explosive.

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### 5.3. Advice for firefighters

Protection during firefighting

Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

No additional information available

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

No additional information available

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up

Scoop solid spill into closing containers.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed

Normal use of this product shall imply use in accordance with the instructions on the packaging and in line with the expectations of a professional user.

Precautions for safe handling

The product should not be used for purposes other than those shown above without first referring to the supplier and obtaining written handling instructions.

Hygiene measures

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

Store in a dry place.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

fiberglass (65997-17-3)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	1 fibers/cm <sup>3</sup> (Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 1 fibers/cm <sup>3</sup> (Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 5 mg/m <sup>3</sup> (Inhalable fraction)
potassium sulfate (7778-80-5)		
Not applicable		
trisodium hexafluoroaluminate (13775-53-6)		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup>

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<b>cryolite (15096-52-3)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup>
<b>Calcium Carbonate (471-34-1)</b>		
Not applicable		
<b>barium sulfate (7727-43-7)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
<b>calcium fluoride (7789-75-5)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2.5 mg/m <sup>3</sup>
<b>graphite (7782-42-5)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (Respirable fraction)
<b>potassiumtetrafluoroborate (14075-53-7)</b>		
Not applicable		
<b>pyrite (FeS<sub>2</sub>) (1309-36-0)</b>		
Not applicable		
<b>calcium oxide (1305-78-8)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup>
ACGIH	Remark (ACGIH)	URT irr
OSHA	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
<b>zirconium dioxide (1314-23-4)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup>
ACGIH	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup>
<b>silicon carbide (409-21-2)</b>		
ACGIH	ACGIH TWA (mg/m <sup>3</sup> )	3 mg/m <sup>3</sup> (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 0.1 fibers/cm <sup>3</sup> (Respirable fibers: length > 5 µm; aspect ratio ≥ 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination) 10 mg/m <sup>3</sup> (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
<b>Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (1344-28-1)</b>		
Not applicable		

### 8.2. Exposure controls

Appropriate engineering controls  
Personal protective equipment

Ensure good ventilation of the work station.

Dust formation: dust mask. In case of dust production: protective goggles.



Hand protection  
Eye protection  
Skin and body protection  
Respiratory protection

Wear leather gloves.  
Safety glasses.  
Wear suitable protective clothing.  
Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

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Consumer exposure controls

Avoid contact during pregnancy/while nursing.

Other information

Hazardous dust of the workpiece material may be generated during grinding / drilling and/or sanding operations. National regulations for dust exposure limit values have to be taken into consideration as part of the job hazard assessment.

Most of the dust generated during grinding is from the base material being ground and the potential hazard from this exposure must be evaluated. This dust may present a fire or dust explosion hazard and may present a serious health hazard.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Solid
Colour	Mixture contains one or more component(s) which have the following colour(s): Yellow-green Unpurified: blue-black White to yellow-brown Pure substance: colourless to white-grey Unpurified: yellow to brown Commercial substance: yellow to brown Golden-yellow Colourless or white Grey-black Colourless to white-grey White to yellow White Colourless to white
Odour	There may be no odour warning properties, odour is subjective and inadequate to warn of overexposure. Mixture contains one or more component(s) which have the following odour: Odourless
Odour threshold	No data available
pH	No data available
Melting point	No data available
Freezing point	No data available
Boiling point	No data available
Flash point	No data available
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available
Vapour pressure	No data available
Relative density	No data available
Relative vapour density at 20 °C	No data available
Solubility	insoluble in water.
Log Pow	No data available
Auto-ignition temperature	No data available
Decomposition temperature	> 400 °C
Viscosity	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport. Product is not explosive.

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### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

No additional information available

### 10.5. Incompatible materials

No additional information available

### 10.6. Hazardous decomposition products

No additional information available

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Likely routes of exposure

Inhalation

Acute toxicity

Not classified

<b>potassium sulfate (7778-80-5)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Male / female, Read-across, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
ATE US (oral)	6600 mg/kg bodyweight
<b>trisodium hexafluoroaluminate (13775-53-6)</b>	
LC50 inhalation rat (mg/l)	4.47 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
<b>cryolite (15096-52-3)</b>	
LC50 inhalation rat (mg/l)	4.5 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
ATE US (gases)	4500 ppmv/4h
ATE US (vapours)	11 mg/l/4h
ATE US (dust,mist)	1.5 mg/l/4h
<b>Calcium Carbonate (471-34-1)</b>	
LD50 oral rat	> 2000 mg/kg (OECD 420: Acute Oral toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral, 14 day(s))
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal, 14 day(s))
LC50 inhalation rat (mg/l)	> 3 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
<b>barium sulfate (7727-43-7)</b>	
LD50 oral rat	> 5000 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
<b>calcium fluoride (7789-75-5)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)

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<b>calcium fluoride (7789-75-5)</b>	
LC50 inhalation rat (mg/l)	> 5070 mg/m <sup>3</sup> air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
ATE US (oral)	4250 mg/kg bodyweight
<b>graphite (7782-42-5)</b>	
LD50 oral rat	> 2000 mg/kg (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	> 2000 mg/m <sup>3</sup> air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
<b>potassiumtetrafluoroborate (14075-53-7)</b>	
ATE US (oral)	500 mg/kg bodyweight
<b>calcium oxide (1305-78-8)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 425: Acute Oral Toxicity: Up-and-Down Procedure, Rat, Female, Experimental value, Oral)
LD50 dermal rabbit	> 2500 mg/kg bodyweight (EU Method B.3: Acute toxicity (dermal), 24 h, Rabbit, Male / female, Experimental value, Dermal)
<b>zirconium dioxide (1314-23-4)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LC50 inhalation rat (mg/l)	> 4.3 mg/l (OECD 436: Acute inhalation toxicity-acute toxic class method, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
<b>silicon carbide (409-21-2)</b>	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LD50 dermal rat	> 2000 mg/kg bodyweight (OECD 402: Acute Dermal Toxicity, 24 h, Rat, Male / female, Experimental value, Dermal)
<b>Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (1344-28-1)</b>	
LD50 oral rat	> 15900 mg/kg
LC50 inhalation rat (mg/l)	7.6 mg/l
ATE US (vapours)	7.6 mg/l/4h
ATE US (dust,mist)	7.6 mg/l/4h
Skin corrosion/irritation	Not classified
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Potential adverse human health effects and symptoms	Irritation: may cause irritation to the respiratory system.
Symptoms/effects after inhalation	May cause respiratory irritation.
Symptoms/effects after eye contact	May cause severe irritation.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

<b>potassium sulfate (7778-80-5)</b>	
LC50 fish 1	680 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, GLP)
<b>trisodium hexafluoroaluminate (13775-53-6)</b>	
LC50 fish 1	99 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	156 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
<b>cryolite (15096-52-3)</b>	
LC50 fish 1	99 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Static system, Fresh water, Experimental value)
EC50 Daphnia 1	156 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value)
<b>Calcium Carbonate (471-34-1)</b>	
LC50 fish 1	> 100 % (OECD 203: Fish, Acute Toxicity Test, 96 h, Oncorhynchus mykiss, Semi-static system, Fresh water, Experimental value, Saturated solution)
EC50 Daphnia 1	> 100 % (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Saturated solution)
<b>barium sulfate (7727-43-7)</b>	
LC50 fish 1	> 174 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)
<b>calcium fluoride (7789-75-5)</b>	
LC50 fish 1	107.5 ppm (EPA 600/3-75/009, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across, Fluorine ion)
EC50 Daphnia 1	97 - 270 mg/l (48 h, Daphnia magna, Static system, Fresh water, Literature, Fluorine ion)
<b>graphite (7782-42-5)</b>	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Danio rerio, Static system, Fresh water, Experimental value, Lethal)
EC50 Daphnia 1	> 100 mg/l (OECD 202: Daphnia sp. Acute Immobilisation Test, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, Behaviour)
<b>calcium oxide (1305-78-8)</b>	
LC50 fish 1	>= 1070 mg/l (Equivalent or similar to OECD 203, 96 h, Cyprinus carpio, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	>= 159.6 mg/l (EPA OPP 72-2, 24 h, Crustacea, Static system, Fresh water, Experimental value, Lethal)
<b>zirconium dioxide (1314-23-4)</b>	
LC50 fish 1	> 100 mg/l (OECD 203: Fish, Acute Toxicity Test, 96 h, Brachydanio rerio, Static system, Fresh water, Experimental value, Nominal concentration)
EC50 Daphnia 1	> 100 mg/l (EU Method C.2, 48 h, Daphnia magna, Static system, Fresh water, Experimental value, GLP)
ErC50 (algae)	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, 72 h, Desmodesmus subspicatus, Static system, Fresh water, Read-across, GLP)

#### 12.2. Persistence and degradability

<b>fiberglass (65997-17-3)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

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<b>fiberglass (65997-17-3)</b>	
BOD (% of ThOD)	Not applicable
<b>potassium sulfate (7778-80-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>trisodium hexafluoroaluminate (13775-53-6)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>cryolite (15096-52-3)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>Calcium Carbonate (471-34-1)</b>	
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>barium sulfate (7727-43-7)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>calcium fluoride (7789-75-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>graphite (7782-42-5)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>potassiumtetrafluoroborate (14075-53-7)</b>	
Persistence and degradability	Biodegradability in soil: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>pyrite (FeS<sub>2</sub>) (1309-36-0)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable
<b>calcium oxide (1305-78-8)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
<b>zirconium dioxide (1314-23-4)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)

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<b>zirconium dioxide (1314-23-4)</b>	
ThOD	Not applicable (inorganic)
<b>silicon carbide (409-21-2)</b>	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

### 12.3. Bioaccumulative potential

<b>fiberglass (65997-17-3)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>potassium sulfate (7778-80-5)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>trisodium hexafluoroaluminate (13775-53-6)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>cryolite (15096-52-3)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.
<b>Calcium Carbonate (471-34-1)</b>	
Log Pow	-2.12 (Estimated value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).
<b>barium sulfate (7727-43-7)</b>	
BCF fish 1	1.2 - 74.4 l/kg (Lepomis macrochirus, Fresh water, Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>calcium fluoride (7789-75-5)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>graphite (7782-42-5)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>potassiumtetrafluoroborate (14075-53-7)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>pyrite (FeS<sub>2</sub>) (1309-36-0)</b>	
Bioaccumulative potential	No bioaccumulation data available.
<b>calcium oxide (1305-78-8)</b>	
Bioaccumulative potential	Not bioaccumulative.
<b>zirconium dioxide (1314-23-4)</b>	
BCF other aquatic organisms 1	0.64 (24 h, Chlorella sp., Fresh water, Read-across, Fresh weight)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).
<b>silicon carbide (409-21-2)</b>	
Bioaccumulative potential	Bioaccumulation: not applicable.

### 12.4. Mobility in soil

<b>potassium sulfate (7778-80-5)</b>	
Ecology - soil	No (test) data on mobility of the substance available.
<b>trisodium hexafluoroaluminate (13775-53-6)</b>	
Log Koc	2.8 - 3.8 (log Koc, Other, Experimental value)
Ecology - soil	Low potential for mobility in soil. Toxic to soil organisms.
<b>cryolite (15096-52-3)</b>	
Log Koc	2.8 - 3.8 (log Koc, Other, Experimental value)
Ecology - soil	Low potential for mobility in soil. Toxic to soil organisms.

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<b>Calcium Carbonate (471-34-1)</b>	
Ecology - soil	Adsorbs into the soil.
<b>barium sulfate (7727-43-7)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>calcium fluoride (7789-75-5)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>potassiumtetrafluoroborate (14075-53-7)</b>	
Ecology - soil	Adsorbs into the soil.
<b>calcium oxide (1305-78-8)</b>	
Ecology - soil	No (test)data on mobility of the substance available.
<b>zirconium dioxide (1314-23-4)</b>	
Surface tension	Not applicable (solid)
Ecology - soil	No (test)data on mobility of the substance available.

### 12.5. Other adverse effects

Other information Do not allow the product, as is, to spread into the environment.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Avoid release to the environment.
Ecology - waste materials	Avoid release to the environment. Hazardous waste due to toxicity.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
<b>14.1. UN number</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>			
Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			

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### 14.6. Special precautions for user

**- Overland transport**

**- Transport by sea**

No data available

**- Air transport**

No data available

**- Rail transport**

Carriage prohibited (RID) No

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

## SECTION 15: Regulatory information

### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )	CAS-No. 1344-28-1	<= 80%
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### 15.2. International regulations

#### CANADA

**fiberglass (65997-17-3)**

Listed on the Canadian DSL (Domestic Substances List)

**Calcium Carbonate (471-34-1)**

Listed on the Canadian DSL (Domestic Substances List)

**Aluminum oxide (Al<sub>2</sub>O<sub>3</sub>) (1344-28-1)**

Listed on the Canadian DSL (Domestic Substances List)

#### EU-Regulations

No additional information available

#### National regulations

No additional information available

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### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

Component	State or local regulations
Aluminum oxide (Al <sub>2</sub> O <sub>3</sub> )(1344-28-1)	
silicon carbide(409-21-2)	
zirconium dioxide(1314-23-4)	
calcium oxide(1305-78-8)	
pyrite (FeS <sub>2</sub> )(1309-36-0)	
potassiumtetrafluoroborate(14075-53-7)	
graphite(7782-42-5)	
calcium fluoride(7789-75-5)	
barium sulfate(7727-43-7)	
Calcium Carbonate(471-34-1)	
cryolite(15096-52-3)	
trisodium hexafluoroaluminate(13775-53-6)	
potassium sulfate(7778-80-5)	
fiberglass(65997-17-3)	

### SECTION 16: Other information

Revision date

09/11/2019

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Full text of H-statements:

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.

NFPA health hazard

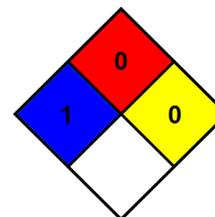
1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard

0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity

0 - Material that in themselves are normally stable, even under fire conditions.



Hazard Rating

Health

1 Slight Hazard - Irritation or minor reversible injury possible

Flammability

0 Minimal Hazard - Materials that will not burn

Physical

0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

SDS\_US\_Hilti

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.*