

Safety Data Sheet

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

Issue date: 10/02/2020 Revision date: 10/02/2020 Supersedes: 09/11/2019 Version: 1.3

SECTION 1: Identification

1.1. Identification

Product form Article

Generic name Abrasive Products

Product code BU ET&A

1.2. Recommended use and restrictions on use

Use of the substance/mixture Milling, grinding and similar activities

1.3. Supplier

Supplier Department issuing data specification sheet

Hilti, Inc.
Legacy Tower, Suite 1000
Hilti Entwicklungsgesellschaft mbH
Hiltistraße 6
7250 Dallas Parkway
Plano, TX 75024 - USA
Hilti Entwicklungsgesellschaft mbH
Kaufering, 86916 - Deutschland
T +49 8191 906876

1-800-879-8000 toll free - F +1 918 254 0522

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

SECTION 2: Hazard(s) 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. GHS Label elements, including precautionary statements

GHS US labelling

No labelling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

10/02/2020 US-OSHA - en Page 1

Safety Data Sheet

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

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
Aluminum oxide (Al2O3)	(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 (FeS2)	(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
Calcium Carbonate	(CAS-No.) 471-34-1	≤ 10	Not classified
barium sulfate	(CAS-No.) 7727-43-7	≤ 10	Not classified
potassium sulfate	(CAS-No.) 7778-80-5	≤ 10	Not classified
graphite	(CAS-No.) 7782-42-5	≤ 5	Not classified
fiberglass	(CAS-No.) 65997-17-3	≤ 5	Not classified
trisodium hexafluoroaluminate	(CAS-No.) 13775-53-6	≤ 5	Acute Tox. 4 (Inhalation), H332 STOT RE 1, H372 Aquatic Chronic 2, H411
cryolite	(CAS-No.) 15096-52-3	≤ 0.1	Acute Tox. 4 (Inhalation), H332 STOT RE 1, H372 Aquatic Chronic 2, H411

Full text of hazard classes and 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

No additional information available

10/02/2020 US-OSHA - en 2/16

Safety Data Sheet

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

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

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

5.2. Specific hazards arising from the chemical

Fire hazard Not flammable.

Hazardous decomposition products in case of fire

Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions

Use extinguishing agent suitable for surrounding fire.

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.

10/02/2020 US-OSHA - en 3/16

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

SECTION 8: Exposure controls/personal protection

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Abrasive Products	
USA - ACGIH - Occupational Exposure Li	
ACGIH TWA (mg/m³)	10 mg/m³ (Non fibrous. I - Inhalable particulate matter, E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica) 3 mg/m³ (Non fibrous. R - Respirable particulate matter, E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica) 0.1 fibers/cm³ (Fibrous (including whiskers). F - Respirable fibers)
Remark (ACGIH)	Non fibrous = TLV® Basis: URT irr Fibrous (including whiskers) = TLV® Basis: Mesothelioma; cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2020
USA - OSHA - Occupational Exposure Lir	nits
OSHA PEL (TWA) (mg/m³)	15 mg/m³ (Total dust) 5 mg/m³ (Respirable fraction)
OSHA PEL (TWA) (ppm)	15 mppcf
Remark (OSHA)	Table Z-3. CAS No. source: eCFR Table Z-1.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
fiberglass (65997-17-3)	
USA - ACGIH - Occupational Exposure Li	mits
ACGIH TWA (mg/m³)	1 fibers/cm³ (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/cm³ (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/m³ (Inhalable fraction)
potassium sulfate (7778-80-5)	
No additional information available	
trisodium hexafluoroaluminate (13775-53	-6)
USA - ACGIH - Occupational Exposure Li	mits
ACGIH TWA (mg/m³)	2.5 mg/m³
cryolite (15096-52-3)	
USA - ACGIH - Occupational Exposure Li	mits
ACGIH TWA (mg/m³)	2.5 mg/m³
Calcium Carbonate (471-34-1)	
No additional information available	
barium sulfate (7727-43-7)	
USA - ACGIH - Occupational Exposure Li	mits
ACGIH TWA (mg/m³)	5 mg/m³ (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
calcium fluoride (7789-75-5)	
USA - ACGIH - Occupational Exposure Li	mits
ACGIH TWA (mg/m³)	2.5 mg/m³
graphite (7782-42-5)	
USA - ACGIH - Occupational Exposure Li	mits

US-OSHA - en 4/16 10/02/2020

Safety Data Sheet

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

potassiumtetrafluoroborate (14075-53-7)	
No additional information available	
pyrite (FeS2) (1309-36-0)	
No additional information available	
calcium oxide (1305-78-8)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Calcium oxide
ACGIH TWA (mg/m³)	2 mg/m³
Remark (ACGIH)	URT irr
USA - OSHA - Occupational Exposure Limits	
Local name	Calcium oxide
OSHA PEL (TWA) (mg/m³)	5 mg/m³
zirconium dioxide (1314-23-4)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	5 mg/m³
ACGIH STEL (mg/m³)	10 mg/m³
silicon carbide (409-21-2)	
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m³)	3 mg/m³ (Respirable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica) 0.1 fibers/cm³ (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/m³ (Inhalable fraction. The value is for particulate matter containing no asbestos and < 1% crystalline silica)
Aluminum oxide (Al2O3) (1344-28-1)	
No additional information available	

8.2. Appropriate engineering controls

Appropriate engineering controls

Ensure good ventilation of the work station.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

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

Materials for protective clothing:

Condition	Material
	Flame retardant protective clothing

Hand protection:

Wear leather gloves.

Туре	Material	Permeation	Thickness (mm)	Penetration
	leather gloves			

Eye protection:

Safety glasses

10/02/2020 US-OSHA - en 5/16

Safety Data Sheet

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

Туре	Use	Characteristics
Safety glasses	Dust	

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Where exposure through inhalation may occur from use, respiratory protection equipment is recommended

Device	Filter type	Condition
		Dust protection

Personal protective equipment symbol(s):





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 whitegrey Unpurified: yellow to brown Commercial substance: yellow to brown Golden-yellow Colourless or white Grey-black Colourless to white-grey White White to yellow 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 рΗ No data available No data available Melting point Freezing point No data available Boiling point No data available No data available Flash point Relative evaporation rate (butylacetate=1) No data available Flammability (solid, gas) No data available Vapour pressure No data available Relative vapour density at 20 °C No data available No data available Relative density

10/02/2020 US-OSHA - en 6/16

Safety Data Sheet

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

Solubility insoluble in water.

Partition coefficient n-octanol/water (Log Pow)

Auto-ignition temperature

No data available

Decomposition temperature

> 400 °C

Viscosity, kinematic
Viscosity, dynamic
Viscosity, dynamic
No data available
Explosive limits
No data available
Explosive properties
No data available
Oxidising properties
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.

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

Do not expose to temperatures above 250°C. Hazardous decomposition byproducts may form with exposure to high temperatures.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)

Acute toxicity (dermal)

Acute toxicity (inhalation)

Not classified

Not classified

potassium sulfate (7778-80-5)	
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))

10/02/2020 US-OSHA - en 7/16

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

trisodium hexafluoroaluminate (13775-	53-6)
LC50 Inhalation - Rat	4.47 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
cryolite (15096-52-3)	
LC50 Inhalation - Rat	4.5 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol), 14 day(s))
Calcium Carbonate (471-34-1)	
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	> 3 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
barium sulfate (7727-43-7)	
LD50 oral rat	> 5000 mg/kg (OECD 401: Acute Oral Toxicity, Rat, Male, Experimental value, Oral, 14 day(s))
calcium fluoride (7789-75-5)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LC50 Inhalation - Rat	> 5070 mg/m³ air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
graphite (7782-42-5)	
LD50 oral rat	> 2000 mg/kg (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LC50 Inhalation - Rat	> 2000 mg/m³ air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value, Inhalation (dust))
calcium oxide (1305-78-8)	
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)
zirconium dioxide (1314-23-4)	
LD50 oral rat	> 5000 mg/kg bodyweight (OECD 423: Acute Oral Toxicity – Acute Toxic Class Method, Rat, Female, Experimental value, Oral)
LC50 Inhalation - Rat	> 4.3 mg/l (OECD 436: Acute inhalation toxicity-acute toxic class method, 4 h, Rat, Male / female, Experimental value, Inhalation (aerosol))
silicon carbide (409-21-2)	
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)
Aluminum oxide (Al2O3) (1344-28-1)	
LD50 oral rat	> 15900 mg/kg
LC50 Inhalation - Rat	7.6 mg/l
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

10/02/2020 US-OSHA - en 8/16

Safety Data Sheet

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

silicon carbide (409-21-2)	
IARC group	2A - Probably carcinogenic to humans
Reproductive toxicity	Not classified

STOT-single exposure Not classified

potassiumtetrafluoroborate (14075-53-7)		
STOT-single exposure	May cause respiratory irritation.	
calcium oxide (1305-78-8)		
STOT-single exposure	May cause respiratory irritation	

STOT-repeated exposure Not classified

trisodium hexafluoroaluminate (13775-53-6)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
cryolite (15096-52-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard Not classified
Viscosity, kinematic No data available

Likely routes of exposure

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.

Inhalation.

SECTION 12: Ecological information

12.1. Toxicity

potassium sulfate (7778-80-5)	
LC50 fish 1	680 mg/l (EPA 600/4-90/027, 96 h, Pimephales promelas, Static system, Fresh water, Experimental value, GLP)
trisodium hexafluoroaluminate (13	3775-53-6)
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)

10/02/2020 US-OSHA - en 9/16

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

cryolite (15096-52-3)		
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)	
Calcium Carbonate (471-34-1)		
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)	
barium sulfate (7727-43-7)		
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)	
calcium fluoride (7789-75-5)		
LC50 fish 1	107.5 ppm (EPA 600/3-75/009, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Readacross, Fluorine ion)	
EC50 Daphnia 1	97 – 270 mg/l (48 h, Daphnia magna, Static system, Fresh water, Literature, Fluorine ion)	
graphite (7782-42-5)		
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)	
calcium oxide (1305-78-8)		
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)	
zirconium dioxide (1314-23-4)		
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

fiberglass (65997-17-3)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable	
ThOD	Not applicable	
BOD (% of ThOD)	Not applicable	
potassium sulfate (7778-80-5)		
Persistence and degradability	Biodegradability: not applicable.	
Chemical oxygen demand (COD)	Not applicable (inorganic)	
ThOD	Not applicable (inorganic)	

10/02/2020 US-OSHA - en 10/16

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

trisodium hexafluoroaluminate (13775-53	-6)		
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
cryolite (15096-52-3)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
Calcium Carbonate (471-34-1)	100 355.000.0		
Persistence and degradability	Biodegradability in soil: not applicable. Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
	Trot applicable (illorganic)		
barium sulfate (7727-43-7)	D'a de mandale Plan and comPractic		
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
calcium fluoride (7789-75-5)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
graphite (7782-42-5)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
potassiumtetrafluoroborate (14075-53-7)			
Persistence and degradability	Biodegradability in soil: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
pyrite (FeS2) (1309-36-0)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable		
ThOD	Not applicable		
BOD (% of ThOD)	Not applicable		
calcium oxide (1305-78-8)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		
zirconium dioxide (1314-23-4)			
Persistence and degradability	Biodegradability: not applicable.		
Chemical oxygen demand (COD)	Not applicable (inorganic)		
ThOD	Not applicable (inorganic)		

10/02/2020 US-OSHA - en 11/16

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

silicon carbide (409-21-2)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. **Bioaccumulative potential**

fiberglass (65997-17-3)				
Bioaccumulative potential No bioaccumulation data available.				
potassium sulfate (7778-80-5)				
Bioaccumulative potential	Not bioaccumulative.			
trisodium hexafluoroaluminate (13775-53-6)				
Bioaccumulative potential	Bioaccumulation: not applicable.			
cryolite (15096-52-3)				
Bioaccumulative potential	Bioaccumulation: not applicable.			
Calcium Carbonate (471-34-1)				
Partition coefficient n-octanol/water (Log Pow)	-2.12 (Estimated value)			
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).			
barium sulfate (7727-43-7)				
BCF fish 1	1.2 – 74.4 l/kg (Lepomis macrochirus, Fresh water, Experimental value)			
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).			
calcium fluoride (7789-75-5)				
Bioaccumulative potential	No bioaccumulation data available.			
graphite (7782-42-5)				
Bioaccumulative potential	No bioaccumulation data available.			
potassiumtetrafluoroborate (14075-53-7)				
Bioaccumulative potential	No bioaccumulation data available.			
pyrite (FeS2) (1309-36-0)				
Bioaccumulative potential	No bioaccumulation data available.			
calcium oxide (1305-78-8)				
Bioaccumulative potential	Not bioaccumulative.			
zirconium dioxide (1314-23-4)				
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).			
silicon carbide (409-21-2)				
Bioaccumulative potential	Bioaccumulation: not applicable.			

12.4. Mobility in soil

fiberglass (65997-17-3)	
Ecology - soil	No (test)data on mobility of the substance available.
potassium sulfate (7778-80-5)	
Ecology - soil No (test)data on mobility of the substance available.	
trisodium hexafluoroaluminate (13775-53-6)	
Partition coefficient n-octanol/water (Log Koc)	2.8 – 3.8 (log Koc, Other, Experimental value)

US-OSHA - en 10/02/2020 12/16

Safety Data Sheet

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

trisodium hexafluoroaluminate (13775-53-6)		
Ecology - soil	Low potential for mobility in soil. Toxic to soil organisms.	
cryolite (15096-52-3)		
Partition coefficient n-octanol/water (Log Koc)	2.8 – 3.8 (log Koc, Other, Experimental value)	
Ecology - soil	Low potential for mobility in soil. Toxic to soil organisms.	
Calcium Carbonate (471-34-1)		
Ecology - soil	Adsorbs into the soil.	
barium sulfate (7727-43-7)		
Ecology - soil	No (test)data on mobility of the substance available.	
calcium fluoride (7789-75-5)		
Ecology - soil	No (test)data on mobility of the substance available.	
potassiumtetrafluoroborate (14075-53-7)		
Ecology - soil	Adsorbs into the soil.	
calcium oxide (1305-78-8)		
Ecology - soil	No (test)data on mobility of the substance available.	
zirconium dioxide (1314-23-4)		
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. Disposal 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 / IATA / IMDG / RID

ADR	IMDG	IATA	RID
14.1. UN number			
Not applicable	Not applicable	Not applicable	Not applicable

10/02/2020 US-OSHA - en 13/16

Safety Data Sheet

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

14.2. UN proper shipping nam	е		
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(e	es)		
Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards			
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 availa	able		

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Rail transport

No data available

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

Not applicable

SECTION 15: Regulatory information

Listed on the Canadian DSL (Domestic Substances List)

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 (Al2O3)	CAS-No. 1344-28-1	≤ 80%
· · · · · · · · · · · · · · · · · · ·		

15.2. International regulations

CANADA

fiberglass (65997-17-3)
Listed on the Canadian DSL (Domestic Substances List)
potassium sulfate (7778-80-5)

10/02/2020 US-OSHA - en 14/16

Safety Data Sheet

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

trisodium hexafluoroaluminate (13775-53-6)

Listed on the Canadian DSL (Domestic Substances List)

cryolite (15096-52-3)

Listed on the Canadian DSL (Domestic Substances List)

Calcium Carbonate (471-34-1)

Listed on the Canadian DSL (Domestic Substances List)

barium sulfate (7727-43-7)

Listed on the Canadian DSL (Domestic Substances List)

calcium fluoride (7789-75-5)

Listed on the Canadian DSL (Domestic Substances List)

graphite (7782-42-5)

Listed on the Canadian DSL (Domestic Substances List)

potassiumtetrafluoroborate (14075-53-7)

Listed on the Canadian DSL (Domestic Substances List)

pyrite (FeS2) (1309-36-0)

Listed on the Canadian NDSL (Non-Domestic Substances List)

calcium oxide (1305-78-8)

Listed on the Canadian DSL (Domestic Substances List)

zirconium dioxide (1314-23-4)

Listed on the Canadian DSL (Domestic Substances List)

silicon carbide (409-21-2)

Listed on the Canadian DSL (Domestic Substances List)

Aluminum oxide (Al2O3) (1344-28-1)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

silicon carbide (409-21-2)

Listed on IARC (International Agency for Research on Cancer)

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

SECTION 16: Other information

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

Revision date 10/02/2020

10/02/2020 US-OSHA - en 15/16

Safety Data Sheet

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

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

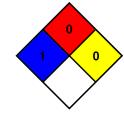
0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as

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.

Indication of changes:

Section	Changed item	Change	Comments
5	Hazardous decomposition products in case of fire	Added	
10	Hazardous decomposition products	Modified	

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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.

10/02/2020 US-OSHA - en 16/16