

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date: 9/21/2022 Issue date: 9/21/2022 Supersedes: 3/29/2019 Version: 4.5

SECTION 1: Identification

1.1. Identification

Product form Trade name Product code Mixture CFS-SP WB BU Fire Protection



Flexible joint spray

1.2. Recommended use and restrictions on use

Use of the substance/mixture

1.3. Supplier

Supplier Hilti, Inc. Legacy Tower, Suite 1000 7250 Dallas Parkway Plano, TX 75024 USA T +1 9724035800 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

Hilti AG

Schaan, 9494

Liechtenstein T +423 234 2111

Feldkircherstraße 100

chemicals.hse@hilti.com

Department issuing data specification sheet

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Reproductive toxicity, Category 2 Full text of H-statements: see section 16 H361

Suspected of damaging fertility or the unborn child.



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2.2. GHS Label elements, including precautionary statements

GHS US labelling

Hazard pictograms (GHS US)



Signal word (GHS US) Hazard statements (GHS US) Precautionary statements (GHS US) Warning H361 - Suspected of damaging fertility or the unborn child. P280 - Wear eye protection, protective clothing, protective gloves. P308+P313 - If exposed or concerned: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. MIXtures			
Name	Product identifier	%	GHS-US classification
hexaboron dizinc undecaoxide	CAS-No.: 12767-90-7	-	Repr. 2, H361 Aquatic Chronic 2, H411
Titanium dioxide	CAS-No.: 13463-67-7	0.1 – 1	Carc. 2, H351

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 general	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation	Get medical advice/attention if you feel unwell. Allow affected person to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention. Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
First-aid measures after eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Get medical advice/attention if you feel unwell. Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.
4.2. Most important symptoms and eff	ects (acute and delayed)

Potential adverse human health effects and	Based on available data, the classification criteria are not met.
symptoms	
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.



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4.3. Immediate medical attention and special treatment, if necessary

No additional information available

SECTION 5: Fire-fighting measures	
5.1. Suitable (and unsuitable) extinguishing	media
Suitable extinguishing media	Water spray. Dry powder. Foam. Carbon dioxide. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.
5.2. Specific hazards arising from the chem	ical
Hazardous decomposition products in case of fire	Carbon dioxide. Carbon monoxide.
5.3. Special protective equipment and preca	autions for fire-fighters
Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	Self-contained breathing apparatus. Complete protective clothing. 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		
Emergency procedures	Evacuate unnecessary personnel.	
6.1.2. For emergency responders		
Protective equipment	For further information refer to section 8: "Exposure controls/personal protection". Equip cleanup crew with proper protection.	
Emergency procedures	Ventilate area.	
6.2. Environmental precautions		
Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.		
6.3. Methods and material for containment	t and cleaning up	

Methods for cleaning up

Mechanically recover the product. On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

6.4. Reference to other sections

For further information refer to section 13. See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and sto	orage
7.1. Precautions for safe handling	
Precautions for safe handling	Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures	Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage, inc	luding any incompatibilities
Storage conditions Incompatible products Incompatible materials	Store in a dry place. Keep container closed when not in use. Strong bases. Strong acids. Sources of ignition. Direct sunlight.



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Storage temperature

35 – 95 °F

SECTION 8: Exposure controls/personal protection

8.1. Control parameters **CFS-SP WB** No additional information available Titanium dioxide (13463-67-7) **USA - ACGIH - Occupational Exposure Limits** Titanium dioxide Local name ACGIH OEL TWA 0.2 mg/m³ (Respirable fraction) 2.5 mg/m³ (Respirable fraction) Remark (ACGIH) LRT irr; A3 ACGIH 2022 Regulatory reference USA - OSHA - Occupational Exposure Limits Local name Titanium dioxide (Total dust) OSHA PEL TWA [1] 15 mg/m³ Regulatory reference (US-OSHA) **OSHA** Annotated Table Z-1 hexaboron dizinc undecaoxide (12767-90-7) **USA - ACGIH - Occupational Exposure Limits** ACGIH OEL TWA 2 mg/m³ (Inhalable fraction) ACGIH OEL STEL 6 mg/m³ (Inhalable fraction)

8.2. Appropriate engineering controls

Environmental exposure controls

Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Protective clothing. Safety glasses. Gloves. Avoid all unnecessary exposure.

Hand protection:					
Protective gloves. EN 374. Wear protective gloves.					
Туре	Material	Permeation Thickness (mm) Penetration		Penetration	
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		
Eye protection:					
Safety glasses. Chemical goggles or safety glasses					
Туре		Field of application		Characteristics	
Safety glasses					



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Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

Not necessary with sufficient ventilation. Wear appropriate mask

Personal protective equipment symbol(s):



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Physical state	Liquid
Appearance	Pasty.
Colour	white red Grey
Odour	characteristic
Odour threshold	Not determined
pH	≈ 8.6
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Relative evaporation rate (butylacetate=1)	No data available
Flammability (solid, gas)	Not applicable. Non flammable.
Vapour pressure	No data available
Relative vapour density at 20 °C	No data available
Relative density	No data available
Density	1.28 kg/l
Molecular mass	Not determined
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity, kinematic	No data available
Viscosity, dynamic	No data available
Explosive limits	No data available
Explosive properties	No data available
Oxidising properties	No data available

9.2. Other information

VOC content

34 g/I EPA Method 24

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.



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10.2. Chemical stability

Stable under normal conditions. Not established.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use. Not established.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological in	formation
11.1. Information on toxicological ef	fects
Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified
Titanium dioxide (13463-67-7)	
LD50 oral rat	> 2000 mg/kg bodyweight (OECD 401: Acute Oral Toxicity, Rat, Male / female, Experimental value, Oral, 14 day(s))
LC50 Inhalation - Rat	> 5.09 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male, Experimental value, Inhalation (dust), 14 day(s))
hexaboron dizinc undecaoxide (127	67-90-7)
LD50 oral rat	> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value, Skin, 14 day(s))
LC50 Inhalation - Rat	> 4.95 mg/l (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Experimental value of similar product, Inhalation (dust), 14 day(s))
Skin corrosion/irritation	Not classified pH: ≈ 8.6
Serious eye damage/irritation	Not classified pH: ≈ 8.6
Respiratory or skin sensitisation	Not classified
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Titanium dioxide (13463-67-7)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified
Viscosity, kinematic	No data available



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Potential adverse human health effects and	Based on available data, the classification criteria are not met.
symptoms	
Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
Symptoms/enects	Not expected to present a significant nazard under anticipated conditions of normal use.

SECTION 12: Ecological information

12.1. Toxicity		
Ecology - general	The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.	
Titanium dioxide (13463-67-7)		
LC50 - Fish [1]	> 1000 mg/l (Pisces, Fresh water)	
LC50 - Other aquatic organisms [1]	> 500 mg/l	
EC50 - Crustacea [1]	> 1000 mg/l (Invertebrata, Fresh water)	
EC50 72h - Algae [1]	> 100 mg/l (OECD 201: Alga, Growth Inhibition Test, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Growth rate)	
ErC50 algae	61 mg/l (EPA 600/9-78-018, 72 h, Pseudokirchneriella subcapitata, Static system, Fresh water, Experimental value, Nominal concentration)	

12.2. Persistence and degradability

CFS-SP WB	
Persistence and degradability	Not established.
Titanium dioxide (13463-67-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable (inorganic)
ThOD	Not applicable (inorganic)
hexaboron dizinc undecaoxide (12767-90-7)	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

CFS-SP WB		
Bioaccumulative potential Not established.		
Titanium dioxide (13463-67-7)		
Bioaccumulative potential Not bioaccumulative.		
hexaboron dizinc undecaoxide (12767-90-7)		
Bioaccumulative potential	No bioaccumulation data available.	



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12.4. Mobility in soil		
Titanium dioxide (13463-67-7)		
Surface tension	No data available in the literature	
Ecology - soil	Low potential for mobility in soil.	
hexaboron dizinc undecaoxide (12767-90-7)		
Ecology - soil	Adsorbs into the soil.	

12.5. Other adverse effects

Other information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Disposal methods	
Waste treatment methods	Dispose in a safe manner in accordance with local/national regulations.
Product/Packaging disposal recommendations	Recycle the material as far as possible.
Ecology - waste materials	Avoid release to the environment.

SECTION 14: Transport information

ADR	IMDG	ΙΑΤΑ	RID
14.1. UN number			
Not applicable	Not regulated	Not regulated	Not applicable
14.2. UN proper shipping name	9		
Not applicable	Not regulated	Not regulated	Not applicable
14.3. Transport hazard class(e	s)		
Not applicable	Not regulated	Not regulated	Not applicable
14.4. Packing group			
Not applicable	Not regulated	Not regulated	Not applicable
14.5. Environmental hazards			
Not applicable	Not regulated	Not regulated	Not applicable

14.6. Special precautions for user

Overland transport Not applicable

Transport by sea

Not regulated

Air transport

Not regulated



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Rail transport

Not applicable

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

Titanium dioxide (13463-67-7)

Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

CFS-SP WB	
U.S California - Proposition 65 - Carcinogens List	Yes
U.S California - Proposition 65 - Developmental Toxicity	Yes
U.S California - Proposition 65 - Reproductive Toxicity - Female	No
U.S California - Proposition 65 - Reproductive Toxicity - Male	No

🗥 WARNING:

This product can expose you to Di-isononyl phthalate, which is known to the State of California to cause cancer, and ethanediol; ethylene glycol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Revision date 09/21/2022 REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE Data sources COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. None.

Other information

Full text of H-statements		
H351	Suspected of causing cancer.	
H361	Suspected of damaging fertility or the unborn child.	
H411	Toxic to aquatic life with long lasting effects.	



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NFPA health hazard	0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.	
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	0 Minimal Hazard - No significant risk to health	
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.	
Personal protection	B - Safety glasses, Gloves	

Indication of changes:			
Section	Changed item	Change	Comments
			general update

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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.