

CFS-IS / CP 611A

Safety Data Sheet

According to SS 586 Part 3: 2014
Issue date: 10.09.2024

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Version: 10.4

SECTION 1: Identification

1.1. Product identifier

Name CFS-IS; CP 611A
Product code BU Fire Protection



1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended uses and restrictions For professional users only

1.4. Supplier's details

Supplier

Hilti Far East Private Ltd.
80 Pasir Panjang Road, #16-83/84 Mapletree Business City Singapore
Singapur 117372
T +65 6777 7887 - F +65 6777 3057
sg-customerservice@hilti.com

Department issuing data specification sheet

Hilti AG
Feldkircherstraße 100 Schaan Liechtenstein 9494
T +423 234 2111
product.compliance-fire.protection@hilti.com

1.5. Emergency phone number

Emergency number GBK GmbH Global Regulatory Compliance
+49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Health hazards Skin sensitisation, Category 1
Reproductive toxicity, Category 2

2.2. GHS label elements including precautionary statements

Hazard pictograms (GHS SG)



Signal word (GHS SG)

Warning

Hazard statements (GHS SG)

H317 : May cause an allergic skin reaction.
H361 : Suspected of damaging fertility or the unborn child.

Precautionary statements

Prevention

P280 : Wear eye protection, protective clothing, protective gloves.

Response

P308+P313 : IF exposed or concerned: Get medical advice/attention.
P333+P313 : If skin irritation or rash occurs: Get medical advice/attention.

2.3. Other hazards which do not result in classification

No additional information available

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SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Synonyms	Concentration (%)	Formula	Product identifier
hexaboron dizinc undecaoxide, heptahydrate	Borogard ZB / boron zinc hydroxide oxide (B12Zn4(OH)14O15) / boron zinc oxide (B6-Zn2-O11) / boron zinc oxide, heptahydrate (=dodecaboron tetrazinc docosaoxide, heptahydrate) / dodecaboron tetrazinc docosaoxide, heptahydrate / Firebrake 500 / Firebrake ZB / hexaboron dizinc undecaoxide, heptahydrate / STORFLAM ZB2335 / Zinborel / ZINC BORATE / ZINC BORATE 2335	5 – 10	B6Zn2O11.7 H2O	CAS-No.: 138265-88-0 EC-No.: 235-804-2
polypropylene glycol alkyl phenyl ether	-	2.5 – 5	-	CAS-No.: 9064-13-5 EC-No.: 618-605-9

SECTION 4: First-aid measures

4.1. Description of necessary first aid measures

First-aid measures general	Never give anything by mouth to an unconscious person. IF exposed or concerned: Get medical advice/attention.
Inhalation	Allow affected person to breathe fresh air. Allow the victim to rest.
Skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash with plenty of water/.... If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instruction on this label). Wash contaminated clothing before reuse.
Eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
Ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms/effects, acute and delayed

Symptoms/effects after inhalation	May cause an allergic skin reaction.
Symptoms/effects after skin contact	May cause an allergic skin reaction.

4.3. Indication of immediate medical attention and special treatment needed

Other medical advice or treatment	Treat symptomatically.
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SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media

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

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5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire Carbon dioxide. Carbon monoxide.

5.3. Special protective actions 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 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

No additional information available

6.1.1. For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up On land, sweep or shovel into suitable containers. Minimise generation of dust. Store away from other materials.

6.4. Reference to other sections

See Section 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling 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. Avoid breathing dust/fume/gas/mist/vapours/spray. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Hygiene measures Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions Keep only in the original container in a cool, well ventilated place away from : Keep container closed when not in use.

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature 5 – 25 °C

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters/Occupational exposure limits

No additional information available

8.2. Monitoring

No additional information available

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8.3. Appropriate engineering control measures

No additional information available

8.4. Personal protection

Hand protection Protective gloves. ISO 374-1. Wear protective gloves.

Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves	Nitrile rubber (NBR)	1 (> 10 minutes)	>0.4		EN ISO 374

Eye protection Chemical goggles or safety glasses

Type	Field of application	Characteristics	Standard
Safety glasses			EN 166, EN 170

Skin and body protection Wear suitable protective clothing

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment

Personal protective equipment symbol(s)



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Pasty.
Molecular mass	Not determined
Colour	dark grey
Odour	characteristic
Odour threshold	Not determined
pH	8.5
Relative evaporation rate (butylacetate=1)	No data available
Melting point	Not applicable
Freezing point	No data available
Boiling point	No data available
Flash point	Not applicable
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Flammability	Non flammable.
Vapour pressure	No data available
Relative vapour density at 20°C	No data available
Relative density	No data available
Density	1.4 g/cm ³
Solubility	No data available
Partition coefficient n-octanol/water (Log Pow)	No data available
Partition coefficient n-octanol/water (Log Kow)	No data available
Viscosity, dynamic	No data available
Explosive properties	No data available
Oxidising properties	No data available
Explosive limits	No data available

9.2. Other information

No additional information available

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SECTION 10: Stability and reactivity

10.1. Reactivity

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

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Acute toxicity

Acute toxicity (oral)	Not classified
Acute toxicity (dermal)	Not classified
Acute toxicity (inhalation)	Not classified

hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	
LD50 oral rat	> 5000 mg/kg bodyweight (FIFRA (40 CFR), Rat, Male / female, Experimental value of similar product, Oral, 14 day(s))
LD50 dermal rabbit	> 5000 mg/kg bodyweight (Equivalent or similar to OECD 402, 24 h, Rabbit, Male / female, Experimental value of similar product, Dermal, 14 day(s))
LC50 Inhalation - Rat	> 4.95 mg/l air (OECD 403: Acute Inhalation Toxicity, 4 h, Rat, Male / female, Read-across, Inhalation (dust), 14 day(s))

polypropylene glycol alkyl phenyl ether (9064-13-5)	
LD50 oral rat	> 5000 mg/kg
Skin corrosion/irritation	Not classified pH: 8.5
Serious eye damage/irritation	Not classified
Respiratory or skin sensitisation	May cause an allergic skin reaction.
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Suspected of damaging fertility or the unborn child.
STOT-single exposure	Not classified
STOT-repeated exposure	Not classified
Aspiration hazard	Not classified

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Density	1.4 g/cm ³

Potential adverse human health effects and symptoms Based on available data, the classification criteria are not met.

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - water	Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term (acute)	Not classified
Hazardous to the aquatic environment, long-term (chronic)	Not classified
Other information	Avoid release to the environment.

hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	
LC50 - Fish [1]	169 µg/l (ASTM E729-88, 96 h, Oncorhynchus mykiss, Static system, Fresh water, Read-across)
EC50 - Crustacea [1]	155 – 413 µg/l (US EPA, 48 h, Ceriodaphnia dubia, Static system, Fresh water, Read-across)
BCF - Fish [1]	116 – 60960 (21 day(s), Semi-static system, Marine water, Read-across, Fresh weight)

polypropylene glycol alkyl phenyl ether (9064-13-5)	
LC50 - Fish [1]	> 10 – < 100 mg/l Leuciscus idus
EC50 - Crustacea [1]	> 100 mg/l Daphnia magna (OECD-Richtlinie 202, Teil 1, statisch)
EC50 72h - Algae [1]	> 100 mg/l

12.2. Persistence and degradability

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Persistence and degradability	May cause long-term adverse effects in the environment.

hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	
Not rapidly degradable	
Persistence and degradability	Biodegradability: not applicable.
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.

hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	
BCF - Fish [1]	116 – 60960 (21 day(s), Semi-static system, Marine water, Read-across, Fresh weight)
Bioaccumulative potential	High potential for bioaccumulation (BCF > 5000).

12.4. Mobility in soil

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Mobility in soil	No additional information available

hexaboron dizinc undecaoxide, heptahydrate (138265-88-0)	
Surface tension	Data waiving
Ecology - soil	Adsorbs into the soil.

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12.5. Other adverse effects

Ozone	Not classified
Other adverse effects	No additional information available

SECTION 13: Disposal considerations

Waste treatment methods	Dispose in a safe manner in accordance with local/national regulations.
Product/Packaging disposal recommendations	Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / RID /

ADR	IMDG	IATA	RID
14.1. UN number or ID number			
Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name			
Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(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 available			

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. Maritime transport in bulk according to IMO instruments

Not applicable

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SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations specific for the product in question

Regulation	Component / Mixture
Arms and Explosives Act	Not applicable
Chemical Weapons Prohibition Act	
Environmental Protection and Management (Air Impurities) Regulations	
Environmental Public Health (Quality of Piped Drinking Water) Regulations	
Misuse of Drugs Act	
Poisons Rules	

15.2. International regulations

R-phrases:

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases:

S35 - This material and its container must be disposed of in a safe way

S61 - Avoid release to the environment. Refer to special instructions/safety data sheets

15.3 Chemical inventory status

No additional information available

SECTION 16: Other information

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Data sources	REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE 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.
Other information	None.
SDS_SG_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.