

## SFC - FIRE CEMENT

**Usage:** A single component ready to use heat resistant sealant which cures to form a hard seal. It withstands temperatures of up to 1500°C.

Conforms to BS 476: Part 20 -  
Warrington Fire Research Report



SFC

## SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product name

: Soudal Firecement HT<sup>®</sup>

Product type REACH

: Mixture

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

#### 1.2.1 Relevant identified uses

Sealant

#### 1.2.2 Uses advised against

No uses advised against known

## SECTION 2 - HAZARDS IDENTIFICATION

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

#### 2.1.1 Classification according to Regulation EC No 1272/2008

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

### 2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Not classified as dangerous according to the criteria of Directive(s) 67/548/EEC and/or 1999/45/EC

### 2.2 Label elements:

Labelling according to Regulation EC No 1272/2008 (CLP)

Not classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Not classified as dangerous in compliance with Directive 67/548/EEC and/or Directive 1999/45/EC

### 2.3. Other hazards:

CLP

Moderately irritant for eyes

DSD/DPD

Moderately irritant for eyes

## SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances:

Not applicable

### 3.2. Mixtures:

Name REACH Registration No	CAS NO EC NO	Conc. (C)	Classification according to DSD/DPD CLP	Classification according to CLP	Note	Remark
SILICIC ACID, SODIUM SALT 01-2119448725-31	1344-09-8 215-687-4	C\<25 %	XI; R36/37/38	EYE IRRIT. 2; H319 STOT SE 3; H335 SKIN IRRIT. 2; H315	(1)(8)	Constituent

### 4.1 Description of first aid measures:

General:

If you feel unwell, seek medical advice.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash with water and soap. Take victim to a doctor if irritation persists.

After eye contact:

Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Immediately after ingestion: give lots of water to drink.

### 4.2 Most important symptoms and effects, both acute and delayed:

#### 4.2.1 Acute symptoms

After inhalation:

No effects known.

After skin contact:

No effects known.

After eye contact:

Redness of the eye tissue. Visual disturbances.

After ingestion:

No effects known.

#### 4.2.2 Delayed symptoms

No effects known.

### 4.3 Indication of any immediate medical attention and special treatment needed:

If applicable and available it will be listed

## SECTION 5 - FIREFIGHTING MEASURES

### 5.1 Extinguishing media:

#### 5.1.1 Suitable extinguishing media:

Adapt extinguishing media to the environment.

#### 5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

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

### 5.3 Advice for firefighters:

#### 5.3.1 Instructions:

No specific fire-fighting instructions required.

#### 5.3.2 Special protective equipment for fire-fighters:

Gloves. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

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

#### 6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

#### 6.1.2 Protective equipment for emergency responders

Gloves. Protective clothing.  
Suitable protective clothing  
See heading 8.2

### 6.2 Environmental precautions:

Contain leaking substance. Use appropriate containment to avoid environmental contamination.

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

Cover spill with inert material, e.g.: sand, earth, vermiculite. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling.

### 6.4 Reference to other sections:

See heading 13.

## SECTION 7 - HANDLING AND STORAGE

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 7.1 Precautions for safe handling:

Observe normal hygiene standards. Keep container tightly closed.

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

#### 7.2.1 Safe storage requirements:

Store in a dry area. Meet the legal requirements. Store at room temperature. Max. storage time: 1 year(s).

#### 7.2.2 Keep away from:

No data available.

#### 7.2.3 Suitable packaging material:

Synthetic material.

#### 7.2.4 Non suitable packaging material:

No data available

### 7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

## SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters:

#### 8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

b) National biological limit values

If limit values are applicable and available these will be listed below.

#### 8.1.2 Sampling methods

If applicable and available it will be listed below.

#### 8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

#### 8.1.4 DNEL/PNEC values

## DNEL- Workers

### Silicic acid, sodium salt

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	1.59 MG/KG BW/DAY	
	Long-term systemic effects inhalation	5.61 mg/m <sup>3</sup>	

## DNEL- General population

### Silicic acid, sodium salt

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	0.8 mg/kg bw/day	
	Long-term systemic effects inhalation	1.38 mg/m <sup>3</sup>	
	Long-term systemic effects oral	0.8 mg/kg bw/day	

## PNEC

### Silicic acid, sodium salt

Compartments	Value	Remark
Fresh Water	7.5 mg/l	0.8 mg/kg bw/day
Salt Water	1 mg/l	1.38 mg/m <sup>3</sup>
Aqua (intermittent releases)	7.5 mg/l	0.8 mg/kg bw/day
STP	348 mg/l	

### 8.1.5 Control banding

If applicable and available it will be listed below.

### 8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

#### 8.2.1 Appropriate engineering controls

#### 8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Keep container tightly closed. Do not eat, drink or smoke during work.

##### a) Respiratory protection:

Respiratory protection not required in normal conditions.

##### b) Hand protection:

Gloves.

##### c) Eye protection:

Safety glasses.

##### d) Skin protection:

Protective clothing.

#### 8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

## SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

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

Physical form	Paste
Odour	Odourless
Odour threshold	Not applicable
Colour	Dark grey to black
Particle size	No data available
Explosion limits	No data available
Flammability	Non combustible
Log Kow	No data available
Dynamic viscosity	No data available
Kinematic viscosity	No data available
Melting point	No data available
Boiling point	No data available
Flash Point	Not applicable
Evaporation rate	No data available
Relative vapour density	Not applicable
Vapour pressure	No data available
Solubility	water ; insolube
Relative density	1.0
Decomposition temperature	No data available
Auto-ignition temperature	No data available
Explosive properties	No chemical group associated with explosive properties
Oxidising properties	No chemical group associated with explosive properties
pH	No data available

### 9.2. Other information:

No data available

## SECTION 10- STABILITY AND REACTIVITY

### 10.1. Reactivity:

No data available.

### 10.2. Chemical stability:

Stable under normal conditions

### 10.3. Possibility of hazardous reactions:

No data available.

### 10.4. Conditions to avoid:

No data available.

### 10.5. Incompatible materials:

No data available.

### 10.6. Chemical stability:

Stable under normal conditions

## SECTION 11 - TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects:

#### 11.1.1 Test Results

Acute toxicity

Soudal Firecement HT°

No (test) data on the mixture available

silicic acid, sodium salt

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value	Remark
Oral	LD50	OCED 401	3400mg/kg bw		Rat (male/female)	Experimental value	Aqueous solution
Dermal	LD50	Other	> 5000 mg/kg bw	24 h	Rat (male/female)	Read- across	Aqueous solution
Inhalation (vapours)	LC50	Other	> 2.06 mg/ l air	4 h	Rat (male/female)	Read- across	Aqueous solution

Classification is based on the relevant ingredients

#### Conclusion

Not classified for acute toxicity

Corrosion/irritation

Soudal Firecement HT°

No (test) data on the mixture available

silicic acid, sodium salt

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Irritating						
Eye	Slightly irritating	Other	1 minutes	24;48;72 hours	Rabbit	Weight of evidence	Aqueous solution
Skin	Irritating						
Inhalation (dust)	Irritating						



Classification is based on the relevant ingredients

Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

Soudal Firecement HT°

No (test) data on the mixture available.

silicic acid, sodium salt

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Skin	Not sensitizing	OECD 429			Mouse (female)	Read- across	Aqueous solution

Classification is based on the relevant ingredients

Conclusion

Not classified as sensitizing for inhalation

Not classified as sensitizing for skin

Specific target organ toxicity

Soudal Firecement HT°

No (test) data on the mixture available

silicic acid, sodium salt

Route of exposure	Parameter	Method	Value	Organ	Effect	Exposure time	Species	Value determination
Oral	NOAEL	OECD 407	2400 mg/kg bw/day		No effect	4 weeks(s)	Rat (male/female)	Experimental value

Classification is based on the relevant ingredients

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Soudal Firecement

No (test) data on the mixture available

silicic acid, sodium salt

Result	Method	Test substrate	Effect	Value determination
Negative	OECD 473	Chinese hamster lung fibroblasts		Experimental value
Negative	OECD 476	Chinese hamster lung fibroblasts		Experimental value

Mutagenicity (in vivo)

Soudal Firecement HT°

No (test) data on the mixture available

Carcinogenicity

Soudal Firecement HT°

No (test) data on the mixture available

Reproductive toxicity

Soudal Firecement HT°

No (test) data on the mixture available

silicic acid, sodium sat

	Parameter	Method	Value	Exposure time	Species	Effect	Organ	Value determination
Development toxicity	NOAEL	Other	>2000mg/kg bw/day	17- 18 day(s)	Mouse	No effect		Read- across
Effects on fertility	NOAEL	Other	>159 mg/kg bw/day	12 weeks(s)	Rat (female)	No effect		Experimental Value

Classification is based on the relevant ingredients

Conclusion CMR

Not classified for reprotoxic or developmental toxicity

Not classified for mutagenic or genotoxic toxicity

Not classified for carcinogenicity

Toxicity other effects

Soudal Firecement HT°

No (test) data on the mixture available

Chronic effects from short and long-term exposure

Soudal Firecement HT°

No effects known.

## SECTION 12- ECOLOGICAL INFORMATION

### 12.1 Toxicity:

Soudal Firecement HT°

No (test) data on the mixture available

silicic acid, sodium salt

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	OECD 203	1108 mg/l	96 h	Danio rerio	Semi- static system	Fresh water	Experimental value
Acute toxicity invertebrates	EC50	EU Method C.2	1700 mg/l	48 h	Daphnia magna	Static system	Fresh Water	Experimental value
Toxicity algae and other aquatic plants	EC50	DIN 38412-9	207 mg/l	72 h	Desmodesmus subspicatus		Fresh Water	Experimental value
Toxicity aquatic micro- organisms	EC0	Other	>348 mg/l	18 h	Pseudomonas putida			Experimental value

	Parameter	Method	Value	Duration	Species	Value determination
Toxicity other terrestrial organisms	LD0	EPA OPPTS 850.3020	125 µl	48 h	Apis mellifera	Experimental value

Classification of the mixture is based on the relevant ingredients of the mixture

### Conclusion

Not classified as dangerous for the environment according to the criteria of Directive 1999/45/EC

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

### 12.2. Persistence and degradability:

Contains readily biodegradable component(s)

### 12.3. Bioaccumulative potential:

Soudal Firecement HT°

Log Kow

Method	Remark	Value	Temperature	Value determination
	No data available			

silicic acid, sodium salt

Log Kow

Method	Remark	Value	Temperature	Value determination
	Not applicable			

### Conclusion

Does not contain bioaccumulative component(s)

### 12.4. Mobility in soil:

No (test) data on mobility of the components available

### 12.5. Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulations (EC) No 1907/2006.

### 12.6. Other adverse effects:

Soudal Firecement HT°

Global warming potential (GWP)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

## **SECTION 13- DISPOSAL CONSIDERATIONS**

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

### 13.1 Waste treatment methods:

#### 13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 10 (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants other than those mentioned in 08 04 09). Can be considered as non hazardous waste according to Directive 2008/98/EC.

#### 13.1.2 Disposal methods

Remove to an authorized waste treatment plant. Do not discharge into drains or the environment.

#### 13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 02 (plastic packaging).

## SECTION 14- TRANSPORT INFORMATION

### Road (ADR)

#### 14.1. UN number:

Transport	Not subject
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#### 14.2. UN proper shipping name:

#### 14.3. Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

#### 14.4. Packing group:

Packing group	
Labels	

#### 14.5. Environmental hazards:

Environmentally hazardous substance mark	No
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#### 14.6. Special precautions for user:

Special provisions	
Limited quantities	

### Rail (RID)

#### 14.1. UN number:

Transport	Not subject
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#### 14.2. UN proper shipping name:

#### 14.3. Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

#### 14.4. Packing group:

Packing group	
Labels	

#### 14.5. Environmental hazards:

Environmentally hazardous substance mark	No
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#### 14.6. Special precautions for user:

Special provisions	
Limited quantities	

## Inland waterways (ADN)

### 14.1. UN number:

Transport	Not subject
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### 14.2. UN proper shipping name:

### 14.3. Transport hazard class(es):

Hazard identification number	
Class	
Classification code	

### 14.4. Packing group:

Packing group	
Labels	

### 14.5. Environmental hazards:

Environmentally hazardous substance mark	No
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### 14.6. Special precautions for user:

Special provisions	
Limited quantities	

## Sea (IMDG/IMSBC)

### 14.1. UN number:

Transport	Not subject
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### 14.2. UN proper shipping name:

### 14.3. Transport hazard class(es):

Class	
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### 14.4. Packing group:

Packing group	
Labels	

### 14.5. Environmental hazards:

Marine pollutant	-
Environmentally hazardous substance mark	no

### 14.6. Special precautions for user:

Special provisions	
Limited quantities	

### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Annex II of MARPOL 73/78	
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Air (ICAO-TI/IATA-DGR)

14.1. UN number:

Transport	Not subject
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14.2. UN proper shipping name:

14.3. Transport hazard class(es):

Class	
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14.4. Packing group:

Packing group	
Labels	

14.5. Environmental hazards:

Environmentally hazardous substance mark	no
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14.6. Special precautions for user:

Special provisions	
Passenger and cargo transport: limited quantities: maximum net quantity per packaging	

**SECTION 15- REGULATORY INFORMATION**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture:

European legislation:  
VOC content Directive 2010/75/EU

VOC content	Remark
0%	

National legislation The Netherlands  
Soudal Firecement HT°

Waste identification (the Netherlands)	LWCA (the Netherlands): KGA category 05
Waterbezwaarlijkheid	11

National legislation France  
Soudal Firecement HT°  
No data available

National legislation Belgium  
Soudal Firecement HT°  
No data available

## 15.2. Chemical safety assessment:

No chemical safety assessment is required.

### SECTION 16- OTHER INFORMATION

Full text of any R-phrases referred to under headings 2 and 3:

R36/37/38 Irritating to eyes, respiratory system and skin

Full text of any H-statements referred to under headings 2 and 3:

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

(\*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.