

SAFETY DATA SHEET

According to Regulation (EC) Nr. 1907/2006 (REACH) and (EU) Nr. 2015/830

SECTION 1 : Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Steel Wire Fibre**

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

Relevant identified uses: Steel Fibre Concrete

1.3 Details of the supplier of the safety data sheet

KrampeHarex GmbH & Co. KG
Pferdekamp 6-8
D-59075 Hamm
Tel.: +49 (0) 2381 / 9779-0
Fax: +49 (0) 2381 / 9779-55
E-Mail: info@krampeharex.com

1.4 Emergency telephone number

Emergency information / Poison information center: +49 (0) 0551 / 19240

SECTION 2 : Hazard identification

2.1 Classification of the substance or mixture

Classification according EC- Regulation 1272/2008
(This product is not classified as hazardous)

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard statements: not applicable

Precautionary statement: P 280

2.3 Others hazards

No particular measures required.

SECTION 3 : Composition / Information on ingredients

3.1 Substances

Steel in the solid state

3.2 Mixtures

Substance	CAS-No.	EINECS-No.	Chemical symbol / weight in %	Hazard-Symbol	SCL and/or M-factor
Iron	7439-89-6	231-096-4	Fe ≥ 98 %	--	--
Carbon	7440-44-0	231-153-3	C 0,04-0,80 %	--	--
Silicon	7440-21-3	231-130-8	Si 0,10-0,30 %	--	--
Manganese	7439-96-3	231-105-1	Mn 0,50-0,80 %	--	--

SECTION 4 : First aid measures

4.1 Description of first aid measures

After inhalation:	No particular measures required.
After skin contact:	No particular measures required.
After eye contact:	In contact with eyes, flush with water and seek medical advice
After swallowing:	not relevant

4.2 Most important symptoms and effects, both acute and delayed

Dust: Irritating

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment

SECTION 5 : Firefighting measures

5.1 Extinguishing media

On delivery the material is not flammable.

Suitable extinguishing media: dry powder or water, Fire extinguishing methods suitable to surrounding vote

Unsuitable extinguishing media: not applicable

5.2 Special hazards arising from the substance or mixture

In case of fire: formation of metal oxides smoke

5.3 Advice for fire-fighters

- Wear fire-fighters self-contained breathing apparatus.
- Prevent the whirling up of particles when you delete a fire.
- Since an steel powder fire can be long lasting, it must be ensured after deglaze, that there is no hidden fire exists.

SECTION 6 : Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear proper protective equipment
- Avoid contact with eyes

6.2 Environmental precautions

Avoiding unintended release of the material in the environment

6.3 Methods and material for containment and cleaning up

Accidental release of the material pick up mechanically and properly to dispose.

6.4 Reference to others sections

Not applicable

SECTION 7 : Handling and storage

7.1 Precautions for safe handling

- Wear proper protective equipment.
- In solid form the product is not flammable and usally presents no risk with respect fire or explosion on education represents.
- Remove fine steel powder particles caused by processing and metalwork, using a suiteable ventilation system.
- Prevent uncontrolled formation of particles and their distribution.
- Ensure that the equipment and facilities are cleaned regulary.
- Use of appropriate techniques for the removal of dust, which the proportion of finely divided particles around reduces to non-critical levels.

7.2 Conditions for safe storage, including any incompatibilities

- The material must be stored in a dry place.

7.3 Specific end uses

No other end-use applications such as in section 1.2.

SECTION 8 : Exposure controls/personal protection

8.1 Control parameters

General dust limit workplace (Steel):

AGW (Germany)	3 mg/m ³	respirable dust
	10 mg/m ³	inhalable dust

8.2 Exposure controls

8.2.1 Use of technological protection measures and appropriate work procedures.

8.2.2 Personal protective equipment

Respiratory protection:	If workplace exposure limit is exceeded (AGW) is a dust mask type FFP2 to wear.
Eye-/Faceprotection :	Wear safety goggles
Hand protection:	not necessary
Skin protection:	Recommendation of suitable protective clothing and safety shoes
Other precautions:	Avoid contact with eyes. Do not breath dust. Eye wash station should be present.

SECTION 9 : Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Formed wire with a different geometry
Physical state:	solid
Odor:	odorless
pH:	7-9 (H ₂ O)
Boiling point:	~ 2.500 °C
Melting range:	~ 1.460 °C
Flash point:	≥ 100 °C
Explosiv limits:	na
Vapor Pressure:	na
Density:	7,85 g/cm ³
Solubility:	insoluble in water

9.2 Other informations

Corrosive product:	no
Random polymerization:	impossible
Hazard separation products:	none known

SECTION 10 : Stability und Reactivity

10.1 Stability and reactivity

Dangerous reactions when combined with acids and alkalis can not be excluded.

10.2 Chemical stability

The product is chemically stable at ambient temperature.

10.3 Possibility of hazardous reactions

See Section 10.1

10.4 Conditions to avoid

Water, moist environment

10.5 Incompatible materials

See section 10.1

10.6 Hazardous decomposition products

Information not available

SECTION 11 : Toxicological information

11.1 Information on toxicological distribution

Acute toxicity: No known harmful effects.

Chronic toxicity: No known harmful effects.

Carcinogenicity: Steel is not on the list of carcinogenic substances. There is no sign of mutations or toxic effects on the human genes.

SECTION 12 : Ecological information

12.1 Toxicity

Water hazard class:

- Not hazard to water

12.2 Persistence and degradability

Information not available.

12.3 Bioaccumulative potential

No information is about octanol/water partition coefficient (KOW) and bioconcentration factor (BCF) known.

12.4 Mobility in soil

Information not available.

12.5 Results of PBT- and vPvB-assessment

Information not available.

12.6 Other adverse effects

Avoid release to the environment

SECTION 13 : Disposal considerations

13.1 Waste treatment methods

Product: In accordance with local regulations of the waste can be disposed of.

Packing: Non-contaminated packages can reuse in accordance with regulations.

SECTION 14 : Transport information

14.1 UN-Nummer

Not applicable, since the product is not a hazardous substance in national and international traffic.

14.2 UN Proper shipping name

Not applicable, since the product is not a hazardous substance in national and international traffic.

14.3 Transport hazard class

Not applicable, since the product is not a hazardous substance in national and international traffic..

14.4 Packing group

Not applicable, since the product is not a hazardous substance in national and international traffic.

14.5 Environmental hazards

Not applicable, since the product is not a hazardous substance in national and international traffic.

14.6 Special precautions for user

Not applicable, since the product is not a hazardous substance in national and international traffic.

14.7 Transport in bulk according to ANNEX II of MARPOL-73/78 and the IBC Code

Information not available.

SECTION 15 : Regulatory information

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

The product is not subject to classification according to EC directive or the Hazardous Substances Ordinance.

15.2 Chemical Safety Assessment

For this substance no safety assessment is required.

SECTION 16 : Others information

16. Other information

Statements of this safety data sheet are in accordance with our actual knowledge and are in order to comply with national and EG legislation. Possible working conditions of users evade our notice and control. Without our written approval the product may not be used for another purpose than mentioned in section I. The user is responsible to keep legal rules. Statements of this safety data sheet only describe safety standards of our product and do not promise any product property.