

According to Commission Directive 93/112/EC

1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product identification:	Steel fibers
Product utilization:	Concrete construction reinforcing element
Manufacturer identification:	Spajic d.o.o.
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2. COMPOSITION / INFORMATION ON INGREDIENTS

Steel fibers are produced from cold drawn low or high carbon steel wire. They are manufactured and controlled according to the EN 14889-1:2006. Steel fibers are shaped wire segments with circular cross-section, with determined length which substitute classic wire armature in reinforced concrete. Steel fibers diameter is between 0,2 mm-1,05mm and length is between 6 mm-60mm. According to the shape steel fibers can be classified as steel fibers with hooked ends, corrugated steel fibers, plain steel fibers, micro steel fibers, serrated steel fibers and others.

3. HAZARDS IDENTIFICATION

Risks are not known. Substance is not classified as dangerous according to directive 1999/45/CE.

Negative influence on the environment	N/A
Negative influence on the human	N/A

4. FIRST AID MEASURES

General advices

After inhalation:	None
Skin contact :	None
Eyes contact:	Consult doctor
Swallow:	Consult doctor
Cautions for a doctor:	None

M 5. FIRE FIGHTING MEASURES

Substance is not flammable	
Suitable extinguishing media	N/A
Non suitable extinguishing media	N/A
Special exposure hazards arising from the substance itself, combustion products, resulting gases	None
Additional information	N/A

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	None
Environmental precautions	None
Cleaning method	Mechanical (broom, shovel)
Additional information	N/A

7. HANDLING AND STORAGE**Handling:**

Steel fibers are added to the concrete to improve mechanical properties. They are affecting forming and expanding of cracks, increasing elasticity of concrete constructions.

Steel fibers dosage in the concrete constructions depends on the load.

Dosing of the steel fibers are according to the manufacturer recommendations.

Dosing of steel fibers are done with special dosing equipment according to the recommendation of the dosing equipment manufacturer.

Storage:

Substance is packed in water soluble paper bags or cardboard boxes, aligned on the pallets and covered with a PVC foil.

The user is obligated to secure the substance not to make contact with water or moisture.

Steel fibers are not flammable, not explosive and they can not cause a fire.

Storage condition	Do not place pallet over a pallet
Additional information	None

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Substance isn't toxic

Always use ears and eyes protection when adding steel fibers to the concrete by means of special equipment.

Respiratory protection	Not necessary
Hands protection	Protection gloves
Body protection	Protection suit
Skin protection	Not necessary
Foot protection	Protection shoes with strengthened sole
Environment protection	Not necessary

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state	Solid
Colour	Gray metallic, dark gray, brasscoated
Odour	N/A
pH value	N/A
Boiling point / Boiling range	N/A
Melting point	> 1000 °C
Autoflammability	N/A
Explosive properties	N/A

Vapour pressure	N/A
Relative density	~7,8 kg/dm ³
Water solubility / Fat solubility	Not soluble

10. STABILITY AND REACTIVITY

Condition to avoid	Humidity
Materials to avoid	Water, acids, oxidant substances
Hazardous decomposition products	Rust

11. TOXICOLOGICAL INFORMATION

Substance does not have toxic characteristics.

Toxicological tests	None
Practice experience	None

12. ECOLOGICAL INFORMATION

Mobility	N/A
Absorption	N/A
Accumulation	N/A
Ecotoxicity	N/A
Biotoxicity	N/A

13. DISPOSAL CONSIDERATION

Steel fibers are packed in water solubility paper bags or cardboard boxes. There are packed on wooden pallets and covered with PVC foil, assuring single time protection. All packages are meant to be recycled.
Unused steel fibers are treated as steel waste.

14. TRANSPORT INFORMATION

Steel fibers does not represent dangerous substance and their transport does not require any special marking.

15. REGULATORY INFORMATION

Substance is marked according to the norms, directives and laws of the EU.
Label and mark None

16. OTHER INFORMATION

None