

**1. IDENTIFICATION OF THE PREPARATION AND COMPANY**

**1.1 Product identification: STEEL FIBER**

**1.2 Product utilization:** manufacture of brake pads and brake linings

**1.3 Company identification:**

SOLANA S.R.L.

Via Provinciale per Dolzago 65 – 23848 OGGIONO – LC - ITALY

PHONE: +39-0341-268211 FAX:+39- 0341-578501 WEB: [www.greensteelgroup.com](http://www.greensteelgroup.com)

**1.4 Emergency telephone number:** +39-0341-268211

**2. COMPOSITION/ INFORMATION ON INGREDIENTS**

| Chemical Name   | CAS no. | Weight %    | Classification |
|-----------------|---------|-------------|----------------|
| Carbon ( C )    |         | 0,06 – 0,13 |                |
| Manganese ( Mn) |         | 0,5 – 1,1   |                |
| Silicon (Si)    |         | 0,10 – 0,20 |                |
| Phosphorus (P)  |         | ≤ 0,04      |                |
| Sulphur (S)     |         | ≤ 0,05      |                |

**3. HAZARD IDENTIFICATION**

No risks known. Not classified as dangerous according to the guideline 1999/ 45/ CE.

**4. FIRST AID MEASURES**

**4.1 Skin:** wash with water

**4.2 Ingestion:** remove the product from the oral cavity and consult a doctor

**4.3 Eyes:** wash well with water and, if necessary, consult a doctor

**4.4 Inhalation:** take the person to a well aired place and, if necessary, consult a doctor

**4.5 Hints for the doctor:** none

**5. FIRE-FIGHTING MEASURES**

**5.1 Extinguishing agents:** water, foam, powder and carbon dioxide (CO<sup>2</sup>)

**5.2 Restrictions:** no limits

**5.3 Risks of fire/ explosion:** not known

**5.4 Combustion gas:** NA

**5.5 Personal protection:** wear protective equipment

**6. ACCIDENTAL DISPERSION MEASURES**

- 6.1 **Personal precautions:** use protective mask, gloves and glasses
- 6.2 **Environmental precautions:** none
- 6.3 **Dispersion procedure:** limit the dispersion and collect the material
- 6.4 **Cleaning procedures:** no indications
- 6.5 **Further information:** none

**7. HANDLING AND STORAGE**

- 7.1 **Handling:** avoid ingestion and contact with eyes. If necessary, use protective mask, gloves and glasses
- 7.2 **Storage:** to be stored in a dry place without humidity
- 7.3 **Particular use:** none

**8. EXPOSURE CONTROL/ PERSONAL PROTECTION**

- 8.1 **Control of professional exposure:** no limits
- 8.2 **Control of environmental exposure:** follow the rules of a good industrial hygiene

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 General information:**

|                      |                     |                    |
|----------------------|---------------------|--------------------|
| <b>Form:</b> fibrous | <b>Colour:</b> grey | <b>Odour:</b> none |
|----------------------|---------------------|--------------------|

**9.2 Important information on human health, safety and environment:**

- 9.2.1 **pH value:** NA
- 9.2.2 **Melting point:** about 1350°C
- 9.2.3 **Boiling point:** NA
- 9.2.4 **Flash point:** NA
- 9.2.5 **Autoignition temperature:** NA
- 9.2.6 **Explosive properties:** none
- 9.2.7 **Vapour pressure:** NA
- 9.2.8 **Density:** NA
- 9.2.9 **Solubility:** none
- 9.2.10 **Partition coefficient (n-octanol/ water):** NA
- 9.2.11 **Viscosity:** NA
- 9.2.12 **Vapour density:** NA
- 9.2.13 **Evaporation speed:** NA

**9.3 Further information:** none

**10. STABILITY AND REACTIVITY**

**10.1 Conditions to be avoided:** oxidizing agents and humidity

**10.2 Materials to be avoided:** corrosive acids

**10.3 Hazardous decomposition products:** none

**11. TOXICOLOGICAL INFORMATION**

**11.1 Acute toxicity (LD 50):** none

**11.2 Primary irritation (skin/ eyes):** no skin/ eyes irritation known

**11.3 Negative effects on people:** none

**12. ECOLOGICAL INFORMATION**

**12.1 Ecotoxicity:** NA

**12.2 Mobility:** NA

**12.3 Persistence and biodegradability:** steel is not a biodegradable material

**12.4 Bio-accumulation potential:** NA

**12.5 Other negative effects:** NA

**12.6 Further information:** none

**13. DISPOSAL CONSIDERATIONS**

**13.1 Product:** according to national regulations

**13.2 Contaminated packaging:** according to national regulations

**14. TRANSPORT INFORMATION**

The transport of this product is not regulated by safety and/ or environmental rules.

UN RID/ ADR NUMBER: not applicable

UN IMO NUMBER: not applicable

UNICAO: not applicable

**15. REGULATORY INFORMATION**

Nothing to report in respect to the guidelines 67/ 548/ CE and 1999/ 45/ CE.



**MATERIAL SAFETY DATA SHEET:  
STEEL FIBER**

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DATE: Feb 07

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**16. OTHER INFORMATION**

This document (MSDS) has been issued according to the provisions of the Ministerial Decree (MD) dd. 28/01/1992, to the Law Decree n. 52 dd. 03/02/1997, to MD dd. 04/04/1997 and dd. 07/07/1999 and according to the EC directives 91/ 155/ CEE, 93/ 112 CEE, 98/ 73/ CE and 01/ 58/ CE.

The above mentioned information is based on our present knowledge of the product and its effects. Not all data are available: the abbreviation NA (not available) means that the information is lacking, NOT that the test results were negative.

The information is provided without any expressed or implicit guarantee on the product quality. The user has to make sure that the information is complete and appropriate on the basis of the specific use he has to make of the material.