



SI[®] Corporation

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423-892-8080

Material Safety Data Sheet

1 PRODUCT IDENTIFICATION AND COMPANY INFORMATION

PRODUCT TYPE: Bright steel fibers for concrete reinforcement

TRADE NAMES: Novocon[®], Xorex[®], Novotex[®]

CONTACT: Customer Service (North America)
SI[®] Concrete Systems
4019 Industry Drive
Chattanooga, TN 37416
1-800-368-2888 or 1-800-634-6374

Customer Service (UK)
SI[®] Concrete Systems
Hayfield House
Devonshire Street
Chesterfield, Derbyshire
S41 7ST
United Kingdom
44-1246-564200

This Material Safety data sheet complies with 29 CFR 1910.1200 OSHA Communication Standard and 91/155/EEC Safety Data Sheets Directive as amended by Directive 93/112/EC

2 COMPOSITION / INFORMATION ON INGREDIENTS

| <u>MATERIAL</u> | <u>CAS#</u> | <u>CONTENTS(%WT/WT)</u> |
|---|-------------|-------------------------|
| Steel fiber | N/A | 100% |
| composed of a mixture of the following: | | |
| Base Metal Iron (Fe) | 7439-89-6 | Various |
| Manganese (Mn) | 7439-96-5 | Various |
| Carbon (C) | 7440-44-0 | Various |
| Silicon (Si) | 7440-21-3 | Various |

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3 HAZARDS IDENTIFICATION

OVERVIEW: Based upon data available to SI Corporation, this product is not hazardous under OSHA Hazard Communication (29 CFR 1910.1200) and EC Directive 93/21/EEC as amended by 96/54/EC. Strong Acids react with steel fibers to produce flammable Hydrogen gas.

| | | |
|---|---------------|---|
| NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATING: | HEALTH: | 0 |
| | FLAMMABILITY: | 0 |
| | REACTIVITY: | 1 |

4 FIRST AID MEASURES

EYES: As for any foreign body, use eyewash. If accompanied by pain or irritation, consult physician.

SKIN: Steel fibers can create cuts or puncture wounds. Treat symptomatically.

INHALATION:

INGESTION:

5 FIRE FIGHTING MEASURES

| | | |
|--------------------------------------|------------|------------|
| FLAMMABLE LIMITS IN AIR, % BY VOLUME | LOWER: N/A | UPPER: N/A |
|--------------------------------------|------------|------------|

| | |
|----------------------|-----|
| EXTINGUISHING MEDIA: | N/A |
|----------------------|-----|

UNUSUAL FIRE OR EXPLOSION HAZARDS: Reaction with strong acids will liberate Hydrogen gas.

SPECIAL FIRE FIGHTING PROCEDURES: Steel products in the solid state present no fire or explosion hazard.

6 ACCIDENTAL RELEASE MEASURES

Product requires no spill or leak containment. Dispose of damaged material in accordance with all governmental regulations.

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7 HANDLING AND STORAGE

STORAGE: Store away from oxidizing materials and strong acids in a cool dry place.

HANDLING: No special handling required.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION REQUIREMENTS: Not required for normal use

PERSONAL PROTECTIVE EQUIPMENT:

| | |
|----------------------------------|---|
| EYE PROTECTION: | Not required unless physical contact with eyes is likely. |
| HAND AND SKIN PROTECTION: | Work gloves are recommended for handling bags of fiber or loose fiber |
| RESPIRATORY PROTECTION: | Not required. |
| OTHER REQUIRED EQUIPMENT: | Standard work clothing and shoes. |

9 PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|--|
| Physical Form | Fibrous material packaged in cardboard boxes |
| Appearance | Bright grey metal fibers |
| Odor | Essentially Odorless |
| pH | N/A |
| Melting Point | >2700°F (1482°C) |
| Solubility in Water | Insoluble |
| Specific Gravity | Approximately 7 to 8 |
| Vapor Density | N/A |
| Boiling Point | N/A |
| % Solids: | ~100% |
| Flash Point: | N/A |
| Autoignition Temperature: | N/A |

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10 STABILITY AND REACTIVITY

| | |
|--|--|
| STABLE <input checked="" type="checkbox"/> | UNSTABLE <input type="checkbox"/> |
| CONDITIONS TO AVOID: | Store indoors away from water |
| MATERIALS TO AVOID: | Strong oxidizing agents and strong acids |
| HAZARDOUS POLYMERIZATION: | Will occur <input type="checkbox"/> Will not occur <input checked="" type="checkbox"/> |
| HAZARDOUS COMBUSTION PRODUCTS: | Inhalation of high concentrations of freshly formed oxide fumes may cause metal fume fever characterized by a metallic taste in the mouth, dryness and irritation of the throat and influenza type symptoms. |

11 TOXICOLOGICAL INFORMATION

| | | |
|---------------------------------------|----------------------|-------------------|
| LISTED AS CARCINOGEN BY: | IARC: No | |
| | NTP: No | |
| | OSHA: No | |
| PEL(OSHA Permissible Exposure Limit): | None established | |
| TLV(ACGIH Threshold Limit): | Base Metal Iron (Fe) | 5 (as Iron Oxide) |
| | Manganese (Mn) | 5 (as Dust) |
| | Carbon (C) | None Established |
| | Silicon (Si) | 10 (Total Dust) |
| <u>ROUTES OF EXPOSURE</u> | | |
| INHALATION: | Not Likely | |
| SKIN CONTACT: | Likely | |
| SKIN ABSORPTION: | N/A | |
| EYE CONTACT: | Likely | |
| INGESTION: | Not Likely | |
| <u>EFFECTS OF OVEREXPOSURE</u> | | |
| ACUTE OVEREXPOSURE: | N/A | |
| CHRONIC OVEREXPOSURE: | N/A | |

12 ECOLOGICAL INFORMATION

| |
|--------------------|
| No data available. |
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13 DISPOSAL CONSIDERATIONS

Transfer to an approved disposal area in accordance with all governmental regulations. Based on information available to SI, this material is not hazardous.

14 TRANSPORT INFORMATION

DOT CLASSIFICATION: Not controlled under DOT (United States)
TDG CLASSIFICATION: No data available
ADR/RID CLASSIFICATION: No data available
IMO/IMDG CLASSIFICATION: No data available
ICAO/IATA CLASSIFICATION: No data available

15 REGULATORY INFORMATION

Federal Regulations (USA): All materials in this product are listed on the TSCA inventory. This product contains no ingredients subject to reporting under SARA 313 (40 CFR Part 372) or SARA Section 311/312
International Regulations: No data available

16 OTHER INFORMATION

The information contained herein is based on the data available to us and is believed to be correct. However, SI® Corporation makes no warranty, expressed or implied, regarding the accuracy of these data or the results to be obtained from the use thereof. SI Corporation assumes no responsibility for the use of the product described herein.

Revision History

Sept 10, 2002: Convert format to comply with 91/155/EEC Safety Data Sheets Directive as amended by Directive 93/112/EC

Revision 2

September 10, 2002