

# Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 09/27/2011

Reviewed on 09/27/2011

## 1 Identification of substance

- **Product details**
- **Trade name:** Ferro Tuff™ Natural
- **Article number:** 67550
- **Application of the substance / the preparation**
- **Manufacturer/Supplier:**  
Dayton Superior  
4226 Kansas Avenue  
Kansas City, KS 66106

Tel.: (866) 329-8724

Emergency Telephone Number: Use only in the event of an emergency involving a spill, leak, fire, exposure, or accident involving chemicals. Within the U.S., Canada, or the U.S. Virgin Islands, call ChemTrec at (800) 424-9300, 24 hours a day. Or, outside these areas, call (703) 527-3887. Collect calls are accepted.

- **Information department:** Environmental, Health, and Safety department.

## 2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

1309-37-1	diiron trioxide	50-75%
65997-15-1	Cement, portland, chemicals	25-50%
7778-18-9	calcium sulphate, natural	≤ 2.5%
7440-21-3	silicon	≤ 2.5%
7632-00-0	sodium nitrite	≤ 1%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

## 3 Hazards identification

- **Hazard description:** May cause eye and skin irritation. Prolonged contact may cause sensitization.
- **Information pertaining to particular dangers for man and environment:**  
The product has to be labelled due to internationally acknowledged calculation procedures using the latest valid versions.
- **Classification system:**  
The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	2	Health = 2
FIRE	0	Fire = 0
PHYSICAL HAZARD	0	Reactivity = 0

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## 4 First aid measures

**· General information:**

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

**· After inhalation:**

Supply fresh air and to be sure call for a doctor.

In case of unconsciousness place patient stably in side position for transportation.

**· After skin contact:**

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

**· After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.**· After swallowing:**

Immediately call a doctor.

Seek medical treatment.

## 5 Fire fighting measures

**· Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**· Protective equipment:**

Because fire may produce thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.

## 6 Accidental release measures

**· Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.**· Measures for environmental protection:** No special measures required.**· Measures for cleaning/collecting:**

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

## 7 Handling and storage

**· Handling:****· Information for safe handling:**

Wear appropriate personal protective clothing to prevent eye and skin contact. Avoid breathing vapors or mists of this product. Use with adequate ventilation. Do not take internally.

**· Information about protection against explosions and fires:** No special measures required.**· Storage:****· Requirements to be met by storerooms and receptacles:** No special requirements.**· Information about storage in one common storage facility:** Not required.**· Further information about storage conditions:** Keep receptacle tightly sealed.

## 8 Exposure controls and personal protection

**· Additional information about design of technical systems:** No further data; see item 7.

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· **Components with limit values that require monitoring at the workplace:**

**1309-37-1 diiron trioxide**

PEL	10 mg/m <sup>3</sup> Fume (Fe <sub>2</sub> O <sub>3</sub> )
REL	5 mg/m <sup>3</sup> as Fe; Iron dust & fume (Fe <sub>2</sub> O <sub>3</sub> )
TLV	5 mg/m <sup>3</sup> as Fe (Iron oxide dust & fume (Fe <sub>2</sub> O <sub>3</sub> ))

**65997-15-1 Cement, portland, chemicals**

PEL	50 mppcf or 15*;5** mg/m <sup>3</sup> *Total dust **Respirable fraction
REL	10*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
TLV	10 mg/m <sup>3</sup> (e)

**7778-18-9 calcium sulphate, natural**

PEL	15*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
REL	10*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
TLV	10 mg/m <sup>3</sup> (e)

**7440-21-3 silicon**

PEL	15*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
REL	10*; 5** mg/m <sup>3</sup> *Total dust **Respirable fraction
TLV	10 mg/m <sup>3</sup>

· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Eye protection:** Wear appropriate eye protection to prevent eye contact.

## 9 Physical and chemical properties

· **General Information**

**Form:** Solid

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<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
· <b>Change in condition</b>	
<b>Melting point/Melting range:</b> Undetermined.	
<b>Boiling point/Boiling range:</b> Undetermined.	
· <b>Flash point:</b>	Not applicable.
· <b>Auto igniting:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Density at 20°C (68°F):</b>	5.704 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	Soluble.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
· <b>Solids content:</b>	100.0 %
· <b>Volatile Organic Compounds:</b>	Not determined

## 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known.
- **Dangerous products of decomposition:** No dangerous decomposition products known.

## 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7632-00-0 sodium nitrite

Oral | LD50 | 85 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** May cause skin irritation.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Harmful  
Irritant

## 12 Ecological information

- **General notes:** Water hazard class 1 (Self-assessment): slightly hazardous for water

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## 13 Disposal considerations

- **Product:**
- **Recommendation:**  
Must not be disposed of as normal garbage. Do not allow product to reach sewage system.  
It is the generator's responsibility to determine if the waste meets applicable definitions of hazardous waste. State and local regulations may differ from federal disposal regulations. Dispose of waste material according to local, state, federal, and provincial environmental regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to Federal, State, and Local regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

## 14 Transport information

- |   |  |
|---|--|
| · <b>DOT regulations:</b>   | Not Regulated  |
| · <b>Hazard class:</b>  | N/A  |
| · <b>Limited Quantity Exemption:</b>  | No Limited Quantity exemption applies for this shipping class. |
| · <b>U.S. Domestic Ground Shipments:</b>  | Same as listed for Standard Shipments above.                   |
| · <b>U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:</b> | Same as listed for Standard Shipments above.                   |
| · <b>Emergency Response Guide (ERG) Number:</b>                                   | Not determine  |
| · <b>Land transport ADR/RID (cross-border):</b>                                   | Not Regulated  |
| · <b>ADR/RID class:</b>   | N/A  |
| · <b>Maritime transport IMDG:</b>   | Not Regulated  |
| · <b>IMDG Class:</b>  | N/A  |
| · <b>Marine pollutant:</b>  | No   |
| · <b>Air transport ICAO-TI and IATA-DGR:</b>                                      | Not Regulated  |
| · <b>ICAO/IATA Class:</b>   | N/A  |

## 15 Regulations

- **Sara**
  - **Section 355 (extremely hazardous substances):**  
None of the ingredient is listed.
  - **Section 313 (Specific toxic chemical listings):**  
This product may contain 1 or more toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR part 372. If so, the chemicals are listed below.
- |           |                |     |
|-----------|----------------|-----|
| 7632-00-0 | sodium nitrite | ≤1% |
| 7439-96-5 | manganese      | ≤1% |
| 7440-47-3 | chromium       | ≤1% |
- **TSCA (Toxic Substances Control Act):**  
All ingredients are listed.
  - **Proposition 65**
  - **Chemicals known to the State of California (Prop. 65) to cause cancer:**
- |            |                            |
|------------|----------------------------|
| 14808-60-7 | Quartz (SiO <sub>2</sub> ) |
|------------|----------------------------|

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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Cancerogenity categories**

· **EPA (Environmental Protection Agency)**

7439-96-5 manganese

D

· **IARC (International Agency for Research on Cancer)**

1309-37-1 diiron trioxide

3

7440-47-3 chromium

3

14808-60-7 Quartz (SiO<sub>2</sub>)

1

· **NTP (National Toxicology Program)**

14808-60-7 Quartz (SiO<sub>2</sub>)

K

· **TLV (Threshold Limit Value established by ACGIH)**

1309-37-1 diiron trioxide

A4

7440-47-3 chromium

A4

14808-60-7 Quartz (SiO<sub>2</sub>)

A2

· **MAK (German Maximum Workplace Concentration)**

14808-60-7 Quartz (SiO<sub>2</sub>)

1

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

14808-60-7 Quartz (SiO<sub>2</sub>)

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:** Xn Harmful

· **Risk phrases:**

22 Harmful if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

43 May cause sensitisation by skin contact.

· **Safety phrases:**

22 Do not breathe dust.

24/25 Avoid contact with skin and eyes.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of soap and water.

· **National regulations:**

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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### **16 Other information**

*The provided information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.*

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- **Department issuing MSDS:** Environmental, Health & Safety Department
- **Contact:** Environmental, Health & Safety Manager

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