Tel.: (866) 329-8724

Safety Data Sheet acc. to OSHA HCS

Printing date 01/17/2015 Reviewed on 01/17/2015

1 Identification

- · Product identifier
- · Trade name: Ferro TuffTM Non Rust Natural
- · Article number: 67567
- · Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Dayton® Superior

4226 Kansas Avenue

Kansas City, KS 66106

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 international number, +1 703 741-5970. Collect calls are accepted.

· Information department: Environmental, Health, and Safety department.

2 Hazard(s) identification

· Classification of the substance or mixture

Carc. 1A H350 May cause cancer.

- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- · Information concerning particular hazards for human 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.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

titanium dioxide

Quartz (SiO2)

· Hazard statements

May cause cancer.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Use personal protective equipment as required.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- $\cdot \textit{\textbf{PBT:}} \ Not \ applicable.$
- · vPvB: Not applicable.

3 Composition/information on ingredients

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

· Dangerous components:			
65997-15-1	Cement, portland, chemicals	25-50%	
13463-67-7	titanium dioxide	10-25%	
1309-37-1	diiron trioxide	10-25%	

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

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Seek medical treatment.
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · 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.

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

(Contd. of page 2)

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions: No special measures required.
- · Methods and material for containment and cleaning up: Ensure adequate ventilation.
- · Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

7 Handling and storage

· Precautions 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.
- · Conditions for safe storage, including any incompatibilities
- · 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.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

65997-15-1 Cement, portland, chemicals

PEL Long-term value: 50 mppcf or 15* 5** mg/m³

*total dust **respirable fraction

REL Long-term value: 10* 5** mg/m³

*total dust **respirable fraction

TLV Long-term value: 1* mg/m³ E; *as respirable fraction

13463-67-7 titanium dioxide

PEL Long-term value: 15* mg/m³

*total dust

REL See Pocket Guide App. A

TLV Long-term value: 10 mg/m³ withdrawn from NIC

1309-37-1 diiron trioxide

PEL Long-term value: 10* 15** 5*** mg/m³

*Fume; Rouge: **Total dust, ***respirable

(Contd. on page 4)

(Contd. of page 3)

Safety Data Sheet acc. to OSHA HCS

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

REL Long-term value: 5 mg/m³

Dust & fume, as Fe

TLV Long-term value: 5* mg/m³
*as respirable fraction

61790-53-2 Diatomaceous earth (Silica-Amorphous)

PEL 20mppcf or 80mg/m3 /%SiO2

REL Long-term value: 6 mg/m³ See Pocket Guide App. C

TLV TLV withdrawn

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

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.

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Wear appropriate eye protection to prevent eye contact.

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Powder

Color: According to product specification

Odor: CharacteristicOdour threshold: Not determined.

· pH-value: Not applicable.

· Change in condition

Melting point/Melting range: Undetermined.
Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

(Contd. on page 5)

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

		(Contd. of page 4
Flammability (solid, gaseous):	Not determined.	
Ignition temperature:		
Decomposition temperature:	Not determined.	
Auto igniting:	Product is not selfigniting.	
Danger of explosion:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapor pressure:	Not applicable.	
Density at 20 °C (68 °F):	6.7 g/cm³ (55.912 lbs/gal)	
Relative density	Not determined.	
Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/wa	ter); Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
Solvent content:		
Organic solvents:	0.0 %	
Solids content:	100.0 %	
Other information	No further relevant information available.	
Volatile Organic Compounds:	Not determined	

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect known.
- · on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.

(Contd. on page 6)

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

· Additional toxicological information:

(Contd. of page 5)

The product shows the following dangers according to internally approved calculation methods for preparations: Irritant

· Carcinogenic categories

Carcinogenic caregories			
· IARC (Inte	ernational Agency for Research on Cancer)		
13463-67-7	7 titanium dioxide	28	
1309-37-	1 diiron trioxide	3	
61790-53-2	2 Diatomaceous earth (Silica-Amorphous)	3	
14808-60-7	7 Quartz (SiO2)	1	
· NTP (Natio	ional Toxicology Program)		
14808-60-7	7 Quartz (SiO2)	K	
· OSHA-Ca	(Occupational Safety & Health Administration)		
None of the	e ingredients is listed.		

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

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.

14 Transport information

- · UN-Number
- · DOT, ADR, IMDG, IATA Not Regulated
- · UN proper shipping name
- $\cdot ADR$ Not Regulated

(Contd. on page 7)

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

		(Contd. of page
· Transport hazard class(es)		
· DOT, ADR, IMDG, IATA		
· Class	N/A	
· Packing group		
· DOT, ADR, IMDG, IATA	III	
Environmental hazards:		
· Marine pollutant:	No	
Transport in bulk according to Annex II of MARPOL73/7	8	
and the IBC Code	Not applicable.	
· Transport/Additional information:		
· ADR		
U.S. Domestic Ground Shipments:	Same as listed for Standard Shipments above.	
U.S. Domestic Ground Non-Bulk (119 gal or less per	Came as listed for Standard Shipmonts above	
container) Shipments:	Same as listed for Standard Shipments above.	
Emergency Response Guide (ERG) Number:	Not determine	
· UN ''Model Regulation'':	UN-, -, N/A, III	

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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.

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
- · Chemicals known to the State of California (Prop. 65) to cause cancer:

13463-67-7 titanium dioxide

14808-60-7 Quartz (SiO2)

· 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)

None of the ingredients is listed.

(Contd. on page 8)

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro TuffTM Non Rust Natural

		(Contd. of page 7)		
· TLV (Thres	hold Limit Value established by ACGIH)			
13463-67-7	titanium dioxide	A4		
1309-37-1	diiron trioxide	A4		
14808-60-7	Quartz (SiO2)	A2		
· MAK (Gern	nan Maximum Workplace Concentration)			
13463-67-7	titanium dioxide	3A		
14808-60-7	Quartz (SiO2)	1		
· NIOSH-Ca	· NIOSH-Ca (National Institute for Occupational Safety and Health)			
13463-67-7	titanium dioxide			
14808-60-7	Quartz (SiO2)			

- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



- · Hazard-determining components of labeling:

titanium dioxide

· Signal word Danger

Quartz (SiO2)

· Hazard statements

May cause cancer.

· Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Use personal protective equipment as required.

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

IF exposed or concerned: Get medical advice/attention.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · National regulations:
- · Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This 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.

- · Department issuing MSDS: Environmental, Health & Safety Department
- · Contact: Environmental, Health & Safety Manager
- · Date of preparation / last revision 01/17/2015 / 32
- · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

(Contd. on page 9)

Printing date 01/17/2015 Reviewed on 01/17/2015

Trade name: Ferro Tuff TM Non Rust Natural

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society) NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) Carc. 1A: Carcinogenicity, Hazard Category 1A

(Contd. of page 8)