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1 Identification

- · Product identifier
- · Trade name: Ferro TuffTM Natural
- · Article number: 67550
- · Application of the substance / the mixture
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Dayton® Superior

4226 Kansas Avenue

Tel.: (866) 329-8724 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

Skin Corr. 1C H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

Skin Sens. 1 H317 May cause an allergic skin reaction.

Carc. 1A H350 May cause cancer.

STOT SE 3 H335 May cause respiratory irritation.

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







GHS05

GHS07

GHS08

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

Cement, portland, chemicals

titanium dioxide

Quartz (SiO2)

· Hazard statements

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May cause cancer.

May cause respiratory irritation.

· Precautionary statements

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Specific treatment (see on this label).

Store locked up.

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

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Safety Data Sheet acc. to OSHA HCS

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· Classification system:

· NFPA ratings (scale 0 - 4)



· HMIS-ratings (scale 0 - 4)



- · Other hazards
- · Results of PBT and vPvB assessment
- · **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	≥20-≤50%
13463-67-7	titanium dioxide	≥0.1-≤15%
1309-37-1	diiron trioxide	≤15.0%
61790-53-2	Diatomaceous earth (Silica-Amorphous)	≤2.0%
14808-60-7	Quartz (SiO2)	≥0.1-≤0.5%

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

4 First-aid measures

- · Description of first aid measures
- General information:

Immediately remove any clothing soiled by the product.

In the event of persistent symptoms recieve medical treatment.

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.

Immediately move exposed person to fresh air. If breathing difficulty persists or develops get prompt medical attention.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

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:

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Seek medical treatment.

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.

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· Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · 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.

Mouth respiratory protective device.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
- Wear protective equipment. Keep unprotected persons away.
- · Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

No special measures required.

· Methods and material for containment and cleaning up:

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

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

- · Handling:
- · 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: Keep respiratory protective device available.
- · Conditions for safe storage, including any incompatibilities
- · **Storage:** cool and dry
- 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.
- · 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.

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(Contd. of page 3) · 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 1309-37-1 diiron trioxide PEL Long-term value: 10* mg/m³ *Fume 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 14808-60-7 Quartz (SiO2) PEL Long-term value: 0.05* mg/m³ *resp. dust; 30mg/m3/%SiO2+2 REL Long-term value: 0.05* mg/m³ *respirable dust; See Pocket Guide App. A TLV Long-term value: 0.025* mg/m³ *as respirable fraction

- · 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.

Store protective clothing separately.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

· Breathing equipment: Suitable respiratory protective device recommended.

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· Protection of hands:



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.

Form: Color: Odor: Odor threshold:	Solid According to product specification Characteristic	
Color: Odor: Odor threshold:	According to product specification	
Color: Odor: Odor threshold:	According to product specification	
Odor: Odor threshold:		
Odor threshold:	Characteristic	
	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	Undetermined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Not determined.	
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 (55.9115 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Insoluble.	
Partition coefficient (n-octanol/water	r): Not determined.	
Viscosity: Dynamic:	Not applicable.	

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		(Contd. of page 5)
Kinematic:	Not applicable.	
· Solvent content:		
Solids content: Other information	100.0 % No further relevant information available.	

10 Stability and reactivity

- · Reactivity No decomposition if stored and applied as directed.
- · Chemical stability No decomposition if stored and applied as directed
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid Keep away from heat and sources of ignition.
- · 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: May cause skin irritation.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: Sensitization possible through skin contact.
- Additional toxicological information:

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

Harmful

Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

Carcinogenic.

· Carcinogenic categories

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

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12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · 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

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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.

UN-Number	
DOT, ADR, ADN, IMDG, IATA	Not Regulated
UN proper shipping name DOT, ADR, ADN, IMDG, IATA	Not Regulated
Transport hazard class(es)	
OOT, ADR, ADN, IMDG, IATA	
Class	Not Regulated
Packing group DOT, ADR, IMDG, IATA	III
Environmental hazards: Marine pollutant:	No
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information:	
4DR	
U.S. Domestic Ground Shipments:	Same as listed for Standard Shipments above.

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U.S. Domestic Ground Non-Bulk (119 gal or less per container) Shipments:

 Same as listed for Standard Shipments above.

 Emergency Response Guide (ERG) Number:

 Not determine

 UN "Model Regulation":

 Not Regulated

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.

,	c Substances Control Act):	
	Cement, portland, chemicals	ACTIVE
	titanium dioxide	ACTIVE
	C.I. Pigment Blue 29	ACTIVE
	diiron trioxide	ACTIVE
61790-53-2	Diatomaceous earth (Silica-Amorphous)	ACTIVE
7440-21-3		ACTIVE
14808-60-7	Quartz (SiO2)	ACTIVE

· Hazardous Air Pollutants

None of the ingredients is 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.

· TLV (Threshold Limit Value established by ACGIH)

13463-67-7	titanium dioxide	A4
1309-37-1	diiron trioxide	A4
14808-60-7	Ouartz (SiO2)	A2

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 • MAK (German Maximum Workplace Concentration)

 13463-67-7 | titanium dioxide
 3A

 14808-60-7 | Quartz (SiO2)
 1

 • NIOSH-Ca (National Institute for Occupational Safety and Health)
 13463-67-7 | titanium dioxide

 14808-60-7 | Quartz (SiO2)
 Quartz (SiO2)

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







GHS05 GHS07

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

Cement, portland, chemicals

titanium dioxide

Quartz (SiO2)

· Hazard statements

Causes severe skin burns and eye damage.

May cause an allergic skin reaction.

May cause cancer.

May cause respiratory irritation.

· Precautionary statements

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Specific treatment (see on this label).

Store locked up.

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

- · National regulations:
- · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

- · 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 SDS: Environmental, Health & Safety Department
- · Contact: Environmental, Health & Safety Manager
- · Date of preparation / last revision 04/20/2023 / 36
- · 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

IATA: International Air Transport Association

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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)

HMIS: Hazardous Materials Identification System (USA) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit REL: Recommended Exposure Limit

Skin Corr. 1C: Skin corrosion/irritation – Category 1C Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Carc. 1A: Carcinogenicity - Category 1A

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

TIC