MATERIAL SAFETY DATA SHEET

TITAN BIOTECH LIMITED

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Iron(III) chloride

Section 1: Product Identification

Product Name: Iron(III) chloride
Product Code: 331
CAS#: 7705-08-0
Chemical Formula: Cl_3Fe
Molecular Formula: 162.20

Section 2: Hazards Identification

Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008
Corrosive to metals (Category 1), H290
Acute toxicity, Oral (Category 4), H302
Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Chronic aquatic toxicity (Category 2), H411
Other hazards - None

Section 3: Composition/Information on Ingredients

Name: Iron(III) chloride
Chemical Formula: Cl_3Fe
Molecular Formula: 162.20

Section 4: First Aid Measures

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.
In case of skin contact
Wash off with soap and plenty of water.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

Section 5: Fire and Explosion Data

Suitable extinguishing media
Special powder against metal fire Dry sand Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture
No data available
Advice for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

Section 6: Accidental Release Measures

Personal precautions and emergency procedures
Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal. Contain spillage, pick up with an electrically protected vacuum cleaner or by wet-brushing and transfer to a container for disposal according to local regulations.

Section 7: Handling and Storage

Precautions:
Avoid formation of dust and aerosols.
Provide appropriate exhaust ventilation at places where dust is formed.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge.
Storage:
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Store in original container. Do not store near combustible materials. Keep in a cool place away from acids. Keep in a cool place away from bases. Keep in a cool place away from oxidizing agents.

Section 8: Exposure Controls/Personal Protection

Eye/face protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9: Physical and Chemical Properties

Physical state and appearance: Not available.
Odor: Not available.

Taste: Not available.
pH: Not available.
Boiling Point: Not available.
Melting Point: Not available.
Critical Temperature: Not available.
Specific Gravity: Not available.
Vapor Pressure: Not applicable.
Vapor Density: Not available.
Volatility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available
Solubility: Not available.

Section 10: Stability and Reactivity Data

Stability: Stable under recommended storage conditions.
Instability Temperature: Not available.
Conditions of Instability: Not data available.
Incompatibility with various substances: Strong oxidizing agents, Potassium, Alkali metals, Bases, Exothermic in contact with water.
Special Remarks on Reactivity: Not available.

Section 11: Toxicological Information.

Acute toxicity: LD50 Oral - mouse - 1.300 mg/kg
LD50 Dermal - rabbit - > 2.000 mg/kg
(OECD Test Guideline 402)
Skin corrosion/irritation: Skin - rabbit
Result: Irritating to skin
Serious eye damage/eye irritation: Eyes - rabbit
Result: Severe eye irritation
Respiratory or skin sensitization: Not available.
Carcinogenicity: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity: Not available.
Specific target organ toxicity - single exposure: Not available.
Specific target organ toxicity - repeated exposure: Not available.
Aspiration hazard: Not available.

Section 12: Ecological Information

Toxicity to fish: LC50 - Pimephales promelas (fathead minnow) - 21,84 mg/l - 96 h
Persistence and degradability: Not available.
Bioaccumulative potential: Not available.
Mobility in soil: Not available.

Section 13: Disposal Considerations

Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

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Section 14: Transport Information

UN number:
ADR/RID: 1773 **IMDG: 1773** **IATA: 1773**
UN proper shipping name
ADR/RID: FERRIC CHLORIDE, ANHYDROUS
IMDG: FERRIC CHLORIDE, ANHYDROUS
IATA: Ferric chloride, anhydrous
Transport hazard class(es):
ADR/RID: 8 **IMDG: 8** **IATA: 8**

Packaging group:
ADR/RID: III **IMDG: III** **IATA:** III

Environmental hazards:
ADR/RID: no **IMDG Marine pollutant:** no **IATA:** no

Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
Not available.
Chemical Safety Assessment: Not available.

Section 16: Other Information

References: Not available.
Other Special Considerations: Not available.
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