MATERIAL SAFETY DATA SHEET

PRODUCT: IRON CHELATE - EDTA

Date of Issue: 1 DEC 2016       Valid until: 1 DEC 2021       GHS Format

1. IDENTIFICATION OF MATERIAL & SUPPLIER

Product (material) Name: Manutec Iron Chelate - EDTA
Other names: None
Manufacturer’s code: MTO0522/MTO0522B
Recommended use: as a trace element fertiliser to correct Iron deficiency in plants

Manufacturer/Supplier Information:
   Name: MANUTEC PTY LTD
   Address: 30 Jonal drive, Cavan, South Australia 5094
   Telephone No: +61-8-8260 2277       Fax: +61-8-8260 2399
   Email: manutec@manutec.com.au

Emergency contact only: Poisons Information Centre (Australia) 131126

3. HAZARDS IDENTIFICATION

Poisons Schedule (Aust)       Not scheduled

Hazard Classification:
NOT hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories:       None specified
Pictograms:       None specified
Signal Word:       None specified
Hazard Statements:       None specified
Precautionary Statements:       None specified

National Transport Commission (Australia)

Dangerous Goods Classification

NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
4. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Entity</th>
<th>CAS Number</th>
<th>Proportion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron (Fe) as EDTA COMPLEX</td>
<td></td>
<td>13.2%</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Skin contact:**
Wash off immediately with plenty of water and soap. Remove clothing if contaminated. Wash contaminated clothing separately.

**Eye contact:**
By separating eyelids, flush eyes with water for 15 minutes. If there is any irritation obtain medical attention immediately.

**Inhalation:**
If inhaled, move to an area of fresh air.

**Ingestion:**
Do not make patient vomit. If conscious rinse out the mouth with water and drink water. Obtain medical attention immediately.

5. FIRE FIGHTING MEASURES

**Extinguishing media:**
Water spray, chemical powder.

**Extinguishing media Direct water spurt** which must not be used for safety reasons:

**Special protective equipment for firefighters:**
Wear protective clothing with autonomous respiration equipment

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**
Avoid contact with skin and eyes. Use rubber or plastic gloves.

**Environmental precautions:**
Avoid contact with water ways and do not pour on sewer system

**Methods for cleaning up:**
Remove the product and move to adequate waste areas. Rest can be eliminated with water

7. HANDLING AND STORAGE

**Handling precautions:**
Handle the product according to safe and hygienic practices. Avoid contact with the product. Do not permit dust accumulation in environment during handling, keep ventilated and use masks

**Storage conditions:**
Avoid extreme temperatures. Keep product in original packing. Keep product in dry place.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures:
Proper Ventilation in place, particualry while handling larger volumes in factory settings and use appropriate protective cloth

Control of exposition limit:
Respiratory protection: Keep ventilated and use mask during handling
Hand protection: Rubber or plastic gloves
Eye protection: Safety glasses as appropriate while handling material
Skin protection: Use adequate clothing or overalls.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point/range</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Aspect</td>
<td>Soluble Powder</td>
</tr>
<tr>
<td>Boiling point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Colour</td>
<td>Yellowish Green</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>0.76-0.81 Kg/L</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>90 g/l (25º C)</td>
</tr>
<tr>
<td>Ignition</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>pH</td>
<td>4.4-4.9 (1% solution)</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Explosion properties</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Stability: Stable at ambient temperatures and normal handling conditions.
Conditions to avoid: Extreme temperatures
Materials to avoid: Steel carbon contact may produce Hydrogen
Hazardous decomposition products:
Combustion or thermal degradation may produce nitrogen

11. TOXICOLOGICAL INFORMATION

The product contains no substances classified as hazardous to health.

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD 50 (oral) in rats</td>
<td>5000 mg/kg</td>
</tr>
<tr>
<td>Skin irritation, test in rabbits</td>
<td>Not available</td>
</tr>
<tr>
<td>Eye irritation, test in rabbits</td>
<td>Not available</td>
</tr>
<tr>
<td>Skin sensibility (test in rabbits)</td>
<td>Not available</td>
</tr>
<tr>
<td>LD50 fish</td>
<td>Not available</td>
</tr>
<tr>
<td>EC50 daphnia</td>
<td>Not available</td>
</tr>
<tr>
<td>IC50 bacteria</td>
<td>Not available</td>
</tr>
<tr>
<td>Biodegradability</td>
<td>Biodegradable</td>
</tr>
</tbody>
</table>

13. DISPOSABLE CONSIDERATIONS
Do not pour in water sewer system or water currents. Dispose the product in authorized manner

12. ECOLOGICAL INFORMATION

General Information Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

14. TRANSPORT INFORMATION

Land Transport (Australia)
Proper Shipping Name   Iron Chelate EDTA Complex
Class                No Data Available
Subsidiary Risk(s)   No Data Available
UN Number            No Data Available
Hazchem              No Data Available
Pack Group           No Data Available
Special Provision    No Data Available

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)
Dangerous Goods Classification
NOT Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. REGULATORY INFORMATION

General Information   No Data Available
Poisons Schedule (Aust) Not scheduled

16. OTHER INFORMATION

The MSDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

STATEMENT OF DISCLAIMER: This Material Safety Data Sheet has been developed according to WHS Code of Practice Preparation of Safety Data Sheets for Hazardous Chemicals Guidelines and written in accordance with GHS format. All information is as accurate and up-to-date as possible. Since Manutec Pty Ltd cannot anticipate or control the conditions under which this information may be used, each user should review the information in the specific context of the intended application. Manutec Pty Ltd will not be responsible for damages of any nature resulting from use of or reliance upon this information.

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