

Material Safety Data Sheet

Date: May 2018

Version:2018-05

1. Identification of the substance / mixture and of the supplier

Product Name: Hygroplex Plus

Identification: Micronutrient Mixture

Recommended use: Fertilizer, only use as directed

Details of Supplier:

Hygrotech Properties (Pty) Ltd, 1 Gerard Braak street, Pyramid, Pretoria, 0120

Emergency Telephone numbers:

Griffon Poison Information Centre: 082 446 8946

Hygrotech Head Office: 012 545 8000 (o/h)

2. Hazard identification

Physical/chemical hazards	Mild to moderate irritation to skin and eyes on contact, harmful if swallowed
Label Elements	
Signal Word	Warning
Hazardous statement	Causes skin irritation

3. Composition/information on ingredients

Substance/mixture:

Chemical identity	CAS no,	%	R-phrases
Iron chelate	15708-41-5	<70	R36/37/38
Zinc chelate	14025-21-9	<7	R36/37/38
Manganese chelate	15375-84-5	<16	R36/37/38

4. First Aid measures

Inhalation	Allow the patient to rest in a well-ventilated area. If necessary use artificial respiration to support vital functions Remove and isolate contaminated clothing and shoes. Make sure medical personnel are aware of the substance involved, and take precaution to protect them.
Ingestion	If this product is swallowed, CALL A PHYSICIAN OR POISON CONTROL CENTRE FOR MOST CURRENT INFORMATION. Do not induce vomiting.
Skin contact	Decontaminate the affected area with running water. Minimum recommended flushing time is 15 Minutes, especially if an adverse skin reaction occurs.
Eye contact	IMMEDIATELY flush with running water for at least 15 minutes, keep eyelids open. COLD water must be used
Additional information	Take a copy of the label and MSDS to Physician or health professional with victim

5. Fire-fighting measures

Suitable extinguishing media	Water spray, carbon dioxide, foam, dry chemicals, halon and any other ABS Class
Hazards arising from the chemical	When involved in a fire and exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapours and toxic gasses (eg oxides, carbon monoxide, ammonia and carbon dioxide)
Special protective equipment	Fire responders should wear eye protection. Structural fire fighters must wear self-contained breathing apparatus and full protective equipment. If possible prevent runoff water from entering storm drain bodies of water or other environmentally sensitive areas

6. Accidental release measures

Personal precaution	In case of a release, clear the affected area and protect people. Appropriately trained personnel, in proper personal protective equipment, using pre-planned procedures, should respond to uncontrolled releases
Environmental precaution	Prevent contamination of environmentally sensitive areas
Containment and clean-up	For small spills: gloves, safety glasses and appropriate body protection For large spills: Minimum personal protective equipment should be level C: triple gloves, chemical resistant suit and air purifying respirator with a high-efficiency particulate filter. If necessary dike the spill to prevent release from contaminating environmentally sensitive areas. Absorb spilled liquid with polypads or other suitable absorbent material. Place all spill residue in a appropriate container and seal. Re-use this product or dispose of it in accordance with regulations

7. Handling and storage

Safe handling	Avoid getting the product on yourself. Wash thoroughly after handling this material. Do not eat, drink, smoke or apply cosmetics while handling this product. Use in well ventilated area
Safe storage	Open container slowly on a stable surface. Re-lease any pressure build-up from the container before totally opening the lid. All containers containing this material must be clearly labelled. Empty containers should be handled with care. Store containers in a cool dry location, away from direct sunlight and sources of intense heat, or where freezing is possible. Store away from incompatible materials (see section 10) Material should be stored in secondary containers or dike area. Keep containers tightly closed when not in use. Inspect all incoming containers before storage to ensure that containers are properly labelled and not damaged

8. Exposure controls/personal protection

Occupational exposure limits	-
Engineering controls	Use with adequate ventilation to prevent inhalation of spray or mist. All operations should be directed at minimising the generation of aerosols, sprays or mist. Eyewash stations and safety showers should be near areas where this product is used or sprayed
Individual protection measures	Hand: wear neoprene gloves for routine industrial use Eye: splash goggles Skin: Use body protection appropriate for the task at hand

9. Physical and chemical properties

Appearance	Tan colour powder
Odour	Odourless
pH (1%)	7-8
Relative density	0.84 kg/L
Solubility	Soluble in water
Octanol/water partition coefficient:	This product is much more soluble in water

10. Stability and reactivity

Reactivity	
Chemical stability	This product is stable
Conditions to avoid	Extreme temperatures and incompatible materials
Incompatible materials	Strong bases, strong oxidisers, strong reducers and water reactive materials
Hazardous decomposition products	Dust, oxides NOx

11. Toxicology information

Skin irritation	Not available
Sensitization	Not available
Acute toxicity	Not available

12. Ecological information

Eco toxicity : Not available

13. Disposal information

Disposal methods	Rinse empty container 3 times with a volume of water equal to one tenth of the volume of the container and or to the spray tank
Disposal of packaging	Destroy the container by perforation and flattening, before disposal

14. Transport information

UN No.	Not regulated
UN proper shipping name	
Transport hazardous class	
Packing group	
Environmental hazard	No
Trem card no.	Not applicable

15. Regulatory information

Hazard symbol	
Classification:	Causes skin irritation
Risk phrase	R20: Harmful by inhalation R36: Irritating to eyes R37: Irritation to respiratory system R38: Irritation to skin
Safety phrase	S2: Keep out of reach of children S7: Keep container tightly closed S24: Avoid contact with skin S25: Avoid contact with eyes S29: Do not empty into drains S46: If swallowed, seek medical advice immediately and show the container or label

16. Other information

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Prepared by	User2005

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