Name of the Product **Knudson C Orchid Microelements (100X)**
Code No. **TS2059**

Section 1 : **Chemical Identification**

Code No.	:	**TS2059**
Name of the Product	:	**Knudson C Orchid Microelements (100X)**
Produced by	:	Central Drug House Pvt. Ltd.
Address	:	7/28 Vardaan House, Darya Ganj, New Delhi (INDIA)
Tel. No.	:	00 91 11 49404040

Section 2 Hazards Identification

2.1 Classification of the substance or mixture

CLP Classification-Regulation (EC) No. 1272/2008[EU-GHS/CLP]

Specific target organ toxicity, repeated exposure, (Category 2), H373
Hazardous to the aquatic environment, long term hazard, (Category 2), H411
For the full text of the H-Statements mentioned in this Section, See Section 16

2.2 Label elements

Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word Warning

Hazard Statement(s)

H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

Precautionary Statement(s)

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304 + P312	IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P307 + P311	IF exposed: call a POISON CENTER or doctor/physician.
P391	Collect spillage. Hazardous to the aquatic environment

2.3 Other Hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Section 3 Composition/Information On Ingredients

Component	Classification	Concentration
Manganese sulphate		
CAS No. : 10034-96-5 EC No. : 232-089-9 Index-No : 025-003-00-4	**As Per EC Regulation 1272/2008** STOT RE 2; Aquatic Chronic 2 H373; H411	>=15 - <=20%

For the full text of the H-Statements and classification mentioned in this Section, see Section 16

Section 4 First - Aid Measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing,give artificial respiration. Consult a physician. ***In case of skin contact*** Wash off with soap and plenty of water. Consult a physician. ***In case of eye contact*** Rinse immediately with plenty of water for at least 15 minutes. Consult a physician. ***If swallowed*** Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician. **4.2 Most important symptoms and effects, both acute and delayed** The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11. **4.3 Indication of immediate medical attention and special treatment needed** Treat symptomatically.
Section 5	**Fire Fighting Measures**
	5.1 Extinguishing media ***Suitable extinguishing media*** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. ***Unsuitable extinguishing media*** No data available. **5.2 Special hazards arising from the substance or mixture** Magnesium oxides, Sulphur oxides, Sodium oxides, Iron oxides, Calcium Oxide, Cobalt oxides, Copperoxides, Manganese oxides,, Molybdenum oxides, Oxides of Phosphorus, Potassium oxides, Zinc oxides **5.3 Precautions for fire-fighters** Cool closed containers exposed to fire with water spray. **5.4 Further information** Wear self-contained breathing apparatus for firefighting if necessary.
Section 6	**Accidental Release Measures**
	6.1 Personal precautions, protective equipment and emergency procedures Use personnel protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8. **6.2 Environmental precautions** Prevent further leakage or spillage if safe to do so. DO not let product enter drains. Discharge into environmental Must be avoided **6.3 Methods and materials for containment and cleaning up** Keep in suitable, closed containers for disposal. 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). Keep in suitable, closed containers for disposal **6.4 Reference to other sections** For disposal see Section 13.
Section 7	**Handling and Storage**
	7.1 Precautions for safe handling Avoid formation of dust and aerosols. Wear protective gloves and eye/face protection. Use only in well ventilated areas. Keep away from heat, sparks and open flame. **7.2 Conditions for safe storage, including any incompatibilities** Store in cool/well-ventilated place ***Recommended Storage Temperature :*** 2 to 8° C

	7.3 Specific end uses Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.
Section 8	**Exposure Controls / Personal Protection**
	8.1 Control parameters **8.2 Exposure controls** ***Appropriate engineering controls*** Handle in accordance to general industrial hygiene and safety practice. Wash hands before breaks, immediately after handling the products and at the end of workday. ***Personal protective equipment*** ***Eye/face protection*** *Safety glasses with side-shields conforming to EN 166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU). Have eye-washing facilities readily available where eye contact can occur.* ***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 contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. ***Body protection*** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. ***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. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). ***Environment exposure controls*** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Section 9	**Physical and Chemical Properties**
	9.1 Information on basic physical and chemical properties

Appearance	White to off-white homogenous powder
Odour	No data available
Odour Threshold	No data available
pH	3.4-4.4
Melting/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Upper/lower flammability or explosive limits	No data available
Evaporation rate	No data available
Flammability (Solid, gas)	No data available
Vapour pressure	No data available
Relative density	No data available
Water solubility	Soluble in water
Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available

	Explosive properties — No data available Oxidizing properties — No data available Vapour density — No data available Thermal decomposition — No data available **9.2 Other safety information** No data available
Section 10	**Stability and Reactivity**
	10.1 Reactivity No data available **10.2 Chemical stability** Stable under recommended storage conditions. **10.3 Possibility of hazardous reactions** No data available **10.4 Conditions to avoid** No data available **10.5 Incompatible materials** No data available **10.6 Hazardous decomposition products** Hazardous decomposition products formed under fire conditions - Nitrogen oxides(NOx), Sulphur oxides, Oxides of phosphorus,. Potassium oxides, Magnesium oxide, Cobalt/cobalt oxides, Calcium oxide, Copper oxides
Section 11	**Toxicological Information**
	11.1 Information on toxicological effects ***Acute toxicity*** No data available Remarks : No data available No data available ***Skin corrosion/irritation*** No data available ***Serious eye damage/eye irritation*** No data available ***Respiratory or skin sensitisation*** No data available ***Germ cell mutagenicity*** No data 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*** No data available ***Specific target organ toxicity - repeated exposure*** No data available ***Aspiration hazard*** No data available ***Additional Information*** RTECS **:** Not Applicable
Section 12	**Ecological Information**
	12.1 Toxicity No data available **12.2 Persistence and degradability** No data available

	12.3 Bioaccumulative potential No data available **12.4 Mobility in soil** No data available **12.5 PBT and vPvB assessment** This preparation contains no substance considered to be persistent, bioaccumulating or toxic (PBT)or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. **12.6 Other adverse effects** No data available
Section 13	**Disposal Considerations**
	13.1 Waste treatments methods **Product** Dispose of as unused product **13.2 Contaminated packaging** Burn in a chemical incinerator equipped with an afterburner and srcubber but exert extra care in igniting as this material is highly flammable. Contact a licenced professional waste disposal service todispose off this material.
Section 14	**Transport Information**
	14.1 UN-No ADNR : ADR : IATA_C : IATA_P : IMDG : RID : **14.2 UN proper shipping name** ADNR : Not dangerous goods ADR : Not dangerous goods IATA_C : Not dangerous goods IATA_P : Not dangerous goods IMDG : Not dangerous goods RID : Not dangerous goods **14.3 Transport hazard class (es)** ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID : - **14.4 Packaging group** ADNR : ADR : IATA_C : IATA_P : IMDG : RID : **14.5 Environmental hazards** ADR : No IMDG : Marine Pollutant : No IATA_C : No **14.6 Special precautions for use** No data available
Section 15	**Regulatory Information**
	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. **15.1 Safety health and environment regulations/legislation specific for the substance or mixture** No data available **15.2 Chemical Safety Assessment** For this product a chemical safety assessment was not carried out.

Section 16	**Other Information**	
	H373	May cause damage to organs through prolonged or repeated exposure
	H411	Toxic to aquatic life with long lasting effects
	Aquatic Chronic 2	Hazardous to the aquatic environment, long term hazard, Category 2
	STOT RE 2	Specific target organ toxicity, repeated exposure, Category 2
	Further Information	
	The information contained in this data sheet represents the best information currently available to us. However, no warranty is made with respect to its completeness and we assume no liability resulting from its use. The information is offered solely for user's obligation to investigate and determine the suitability of the information for their particular purpose.	