SDS

DJ's Organic ZMM

Issuing body:

DJ's Growers Services and Supplies P/L

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Current: 22/3/2019

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SDS

SECTION 1. IDENTIFICATION

Product identifier: DJ's Growers ZMM

Product type: Solid (crystalline) ingredients dissolved in water.

Uses: Professional applications, foliar and ground fertiliser.

SECTION 2. HAZARD(S) IDENTIFICATION

Classification and labelling have been performed following the guidelines and recommendation of GHS and the intended use.

Classification of the substance or mixture: Not classified.

Signal word: No signal word.

Hazard statements: Not applicable.

Precautionary statements

General: Not applicable.

Supplemental label elements: Not applicable.

Other hazards which do not result in classification: None.

SECTION 3. COMPOSITION AND INGREDIENT INFORMATION

CAS number/other identifiers

CAS number:10034-99-8

Ingredient names: magnesium sulphate heptahydrate

Manganese sulphate, monohydrate

Zinc sulphate, heptahydrate

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of necessary first aid measures

Eye contact: Rinse with plenty of running water. Check for and remove any contact lenses. Get medical attention if irritation occurs.

Inhalation: If fumes inhaled, remove to fresh air. Get medical attention if you feel unwell.

Skin contact: Wash with soap and water. Get medical attention if irritation develops.

Ingestion: Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Eye contact: No specific data. No known significant effects or critical hazards.

Inhalation: No specific data. No known significant effects or critical hazards.

Skin contact: No specific data. No known significant effects or critical hazards.

Ingestion: No specific data. No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or fumes inhaled.

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training.

See toxicological information (section 11)

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing media: Use an extinguishing agent suitable for the surrounding fire. Product is a liquid and will not burn under normal atmospheric pressures.

Unsuitable extinguishing media: None identified.

Specific hazards arising from the chemical: No specific fire or explosion hazard.

Hazardous thermal decomposition products: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides Avoid breathing dusts, vapors or fumes from burning materials. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

Special protective actions for fire-fighters: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: ACCIDENTAL RELEASE MEASURES

General Response Procedure: Ensure adequate ventilation. Do not touch or walk through spilled material. Avoid breathing fumes, protect from contact with eyes, skin and clothing.

Clean Up Procedures: Collect material by containing with soaking material, clay, or earth (sweep up, shovel) and place it into suitable, properly labelled containers for disposal (see SECTION 13).

Containment: Stop leak if safe to do so - Prevent entry into waterways, drains or confined areas.

Decontamination: No information available.

Environmental Precautionary Measures: Spillages and decontamination runoff should be prevented from entering drains and watercourses.

Evacuation Criteria: Spill or leak area should be isolated immediately. Keep unauthorised personnel away. Keep upwind and to higher ground.

Personal Precautionary Measures: Use personal protective equipment as required (see SECTION 8).

SECTION 7: HANDLING AND STORAGE

Handling: Safety showers and eyewash facilities should be provided within the immediate work area for emergency use. Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation.

Do not breathe dust and avoid contact with eyes, skin and clothing. Use personal protective equipment as required (see SECTION 8). Avoid release to the environment - Collect spillage (see SECTION 6).

Storage Store in a cool, dry and well-ventilated place. Keep container tightly closed. Protect from moisture. Keep away from food/feedstuffs and incompatible materials (see SECTION 10).

Container Keep in the original container.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

General: No specific exposure standards are available for this product. For Manganese, Zinc and Magnesium, dust & compounds:

- Safe Work Australia Exposure Standard: TWA = 1 mg/m3 (as Mn).

- New Zealand WES (2018) for Manganese fume, dust and compounds (as Mn, Mg, Zn): TWA = 0.2 mg/m3; TWA = 0.02 mg/m3 (respirable dust).

- NIOSH REL for Manganese, Zinc and Magnesium compounds and fume (as Mn, Mg, Zn): TWA = 1 mg/m3; STEL = 3 mg/m3.

- OSHA PEL for Manganese, Zinc and Magnesium compounds and fume (as Mn, Mg, Zn): 5 mg/m3

- Immediately dangerous to life or health (IDLH) concentration: 500 mg/m3 (as Mn, Mg, Zn).

Exposure Limits: No Data Available

Engineering Measures: Use in open air or a system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection Equipment - Respiratory protection: Wear respiratory protection in case of inadequate ventilation or an inhalation risk exists.

Recommended: Dust mask/respirator, Filter type: P1 (refer to AS/NZS 1715 & 1716).

- Eye/face protection: Wear appropriate eye protection to avoid eye contact. Recommended: Safety glasses or chemical goggles.

- Hand protection: Handle with gloves. Recommended: Impervious gloves.

- Skin/body protection: Wear appropriate personal protective clothing to avoid skin contact.

Recommended: Overalls, safety shoes.

Special Hazards Precautions: No information available.

Work Hygienic Practices: Do not eat, drink or smoke when using this product. Wash hands and face thoroughly before breaks and after work.

Remove contaminated clothing and shoes immediately and wash before reuse. Store protective clothing separately.

Biological Limits: No information available.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Odour: Odourless

Vapour Pressure: No Data Available

Relative Vapour Density: No Data Available

Boiling Point: 100 °C

Freezing Point: No Data Available

Specific Gravity: 1.1 (H20 =1)

Flash Point: No Data Available

Bulk Density: No Data Available

Appearance: Powder or granules dissolved in water.

Evaporation Rate: No Data Available

Auto Ignition Temp: No Data Available

Solubility: Soluble in water

Decomposition Temperature: No Data Available

Specific Heat: No Data Available

Octanol Water Coefficient: No Data Available

Saturated Vapour Concentration: No Data Available

Vapour Temperature: No Data Available

Viscosity: No Data Available

Volatile Percent: No Data Available

VOC Volume: No Data Available

Additional Characteristics: No information available.

Potential for Dust Explosion: No information available.

Fast or Intensely Burning Characteristics: No information available.

Non-Flammables That Could Contribute Unusual Hazards to a Fire: No information available.

Properties That May Initiate or Contribute to Fire Intensity: Non-combustible; Material does not burn.

Reactions That Release Gases or Vapours: Decomposes on heating, toxic fumes, including Manganese oxides, Sulphur oxides.

Release of Invisible Flammable Vapours and Gases: No information available.

Particle Size: No Data Available

Partition Coefficient: No Data Available

Net Propellant Weight: No Data Available

10. STABILITY AND REACTIVITY

General Information: No information available.

Chemical Stability: Material is stable under normal conditions.

Conditions to Avoid: Avoid (over)heating.

Materials to Avoid: Incompatible/reactive with oxidising agents.

Hazardous Decomposition: No decomposition when used as directed. Decomposes on heating, emitting toxic fumes, including Manganese oxides, Sulphur oxides.

Hazardous Polymerisation: Will not occur.

11. TOXICOLOGICAL INFORMATION

General Information - Acute toxicity: May be harmful if swallowed.

- Skin corrosion/irritation: May cause skin irritation.

- Eye damage/irritation: May cause eye irritation.

- Respiratory/skin sensitisation: No information available.

- Germ cell mutagenicity: Not considered to be genotoxic.

- Carcinogenicity: Not considered to be carcinogenic.

- Reproductive toxicity: Not considered likely to have reproductive or developmental toxicity.

- STOT (single exposure): May cause respiratory tract irritation (mucous membranes).

- STOT (repeated exposure): May cause damage to organs through prolonged or repeated exposure. Chronic exposure to manganese, magnesium & zinc via inhalation and oral routes may impair the central nervous system (CNS) function in humans.

- Aspiration toxicity: No information available.

Acute Ingestion Acute toxicity (Oral): LD50, Rats: 782 - 2,150 mg/kg bw.

Carcinogen Category: None

12. ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity:

- LC50, Fish (Fathead minnow): 30.6 mg/L (96 h) [anhydrous].

- EC50, Invertebrates (Daphnia magna): 8.3 mg/L (48 h) [anhydrous].

Persistence/Degradability: No information available.

Mobility: The product is soluble in water.

Environmental Fate: Toxic to aquatic life with long lasting effects - Avoid release to the environment.

Bioaccumulation: Potential No information available.

Environmental Impact: No Data Available

13. DISPOSAL CONSIDERATIONS

General Information: Dispose of contents/container in accordance with local/regional/national regulations.

Contaminated packaging: Since emptied containers may retain product residues, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION

Un number:	None allocated.
Proper Shipping Name:	None allocated.
DG Class:	None allocated.
Hazchem Code:	None allocated.
Packing Group:	None allocated.

EPG Number: None allocated.

IERG Number: None allocated.

15. REGULATORY INFORMATION

Safety Phrase: S2 Keep out of reach of children.

S25 Avoid contact with eyes.

Poisons Schedule: Not Scheduled.

16. OTHER INFORMATION

The data and recommendations presented herein are based upon research of others believed to be accurate. However, no warranty is expressed or implied regarding this data or the results to be obtained from use thereof.