SAFETY DATA SHEET (SDS)
ZINC SULFATE MONOHYDRATE

SECTION 1 – IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Manufacturer & Supplier: NUMINOR CHEMICAL INDUSTRIES LTD.
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Product Name: Zinc Sulfate Monohydrate:

Formula: ZnSO₄.H₂O
Synonyms: Zinc Sulphate
Primary Use: Mineral nutrient additive for the feed industry.

SECTION 2 - HAZARDS IDENTIFICATION

Classification according to Regulation (EC) 1272/2008 (GHS-CLP)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Risk of serious damage to eyes. Harmful if swallowed.

GHS Pictogram:

Signal Word: Danger

Hazard Statements:
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
Precautionary Statements:

P273  Avoid release to the environment.
P305 +P351 +P338  If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P501  Dispose of contents/container in accordance with local/regional/national/international regulation.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Formula:  ZnSo4. H20
Molecular Weight::  179.47 g/mol
Appearance & Odour:  Solid granular powder (fine), white in colour.
CAS-No    7446-19-7
EC-No.    231-793-3
Index-No.   030-006-00-9
Classification   Aquatic Acute 1; Aquatic Chronic 1; H302, H318, H410

SECTION 4 - FIRST AID MEASURES

Effects and symptoms:  Chills, fever, nausea, vomiting, coughing, weakness and headaches, skin irritation.
First aid
- Skin contact:  Wash immediately with plenty of water and soap/
- Inhalation:  Remove victim to fresh air. Clean nasal cavity with water. Give oxygen if breathing difficulty. Seek medical attention.
  If feeling unwell, immediately seek medical attention.
- Eye contact:  Rinse immediately with clean water for 15 minutes.
  If feeling unwell, immediately seek medical attention.
- Ingestion:  Immediately rinse mouth with water.
  Do not induce vomiting. Give large quantities of water or milk to drink.
  If feeling unwell, immediately seek medical attention.

Protection of rescue personnel:  Avoid all unnecessary exposure. Use appropriate protection (see Section 9).

SECTION 5 – FIRE, FIGHTING & EXPLOSION DATA

Fire:  Non Combustible.
Flammability:  Non Flammable
Flash point:  Not Combustible
Extinguishing media:  In case of fire in immediate vicinity use any extinguishing agent.
Protection of fire-fighters:  Use breathing apparatus (self-contained breathing apparatus with full face shield). Wear suitable protective clothing.
Hazardous combustion and:  Decomposition products

None.
SECTION 6 - ACCIDENTAL RELEASE MEASURES & SPILL LEAK PROCEDURES

Personal precautions: Wear suitable gloves and eye/face protection. Avoid dust creation.
Environmental precautions: Avoid allowing product to enter drains, sewage system, ground water.
Methods for cleaning up: Sweep up and shovel into suitable containers for disposal. Re-use or recycle waste.

SECTION 7 - HANDLING AND STORAGE

Handling & storing: Good housekeeping - store in a cool dry place - keep containers shut. Avoid making dust. Avoid moisture.
Packing Materials: All materials suitable.

SECTION 8 - EXPOSURE CONTROL / PERSONAL PROTECTION

- Respiratory protection: Respiratory protection equipment necessary when dust is apparent
  Type P1 respirator (EN 143).
- Hand protection: Protective Gloves.
- Skin protection: Material: leather gloves, cotton gloves, rubber gloves.
- Eye protection: Chemical goggles or safety glasses.
- Engineering measures: Mechanical ventilation is recommended.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Melting Point: Not Listed.
Solubility in water: Soluble
Appearance & Odour: Solid granular powder (fine), white to off white colour.

SECTION 10 - STABILITY & REACTIVITY DATA

Stability: Stable under ordinary conditions
Hazardous Reactions: Hazardous decomposition products formed under fire conditions. - Sulphur oxides, Zinc/zinc oxides.

Incompatibility (materials to avoid): Strong oxidizing agents. Avoid moisture
SECTION 11 – TOXILOGICAL INFORMATION

Acute toxicity:
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Dermal: May cause skin irritation.
- Ingestion: Harmful if swallowed.
Dermal irritation: Can cause irritation.
Eyes irritation: Causes serious eye irritation.
Chronic toxicity: Not available.
Sensitization: Not available.
Carcinogenicity: Not listed by IARC and ACGIH as carcinogen.
Mutagenicity: Not available.
Reproductive toxicity: An experimental or tumorigen and mutagen.

SECTION 12 - ECOLOGICAL INFORMATION

Persistence and degradability: Not applicable.
Bioaccumulative potential: Not applicable.
Ecotoxicity: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Mobility: Not applicable.

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal: Comply with local regulations for disposal.
Waste of residues: This material and its container should be labeled Hazardous Goods.
Contaminated packaging: Keep waste packaging separate. Waste should be disposed of in a permitted chemical waste facility.

SECTION 14 - TRANSPORT INFORMATION

ADR/RID
UN-Number: 3077 Class: 9 Packing group: III
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Sulfate monohydrate)

IMDG
UN-Number: 3077 Class: 9 Packing group: III EMS-No: F-A, S-F
Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc Sulphate monohydrate)
Marine pollutant: Yes

IATA
UN-Number: 3077 Class: 9 Packing group: III
Proper shipping name: Environmentally hazardous substance, solid, n.o.s. (Zinc Sulfate monohydrate)
SECTION 15 – REGULATORY INFORMATION

Classification according to Regulation (EC) 1272/2008 (GHS-CLP).
This Safety Data Sheet complies with EC regulation No. 1907/2006/

SECTION 16 - OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3
Aquatic Acute Acute aquatic toxicity
Aquatic Chronic Chronic aquatic toxicity
H302 Harmful if swallowed.
H318 Causes serious eye damage.
H410 Very toxic to aquatic life with long lasting effects.
N Dangerous for the environment
Xn Harmful
R22 Harmful if swallowed.
R41 Risk of serious damage to eyes.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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