Material Safety Data Sheet

MANGANOUS SULPHATE

Infosafe No. AJ18I  Issue Date April 2001  Status ISSUED by APSSC

Classified as hazardous according to criteria of NOHSC

COMPANY DETAILS

Company Name Asia Pacific Specialty Chemicals Limited (ABN 32000316138)
Address 15 Park Road SEVEN HILLS
          NSW 2147
Emergency Tel. 1800 022 037 (24H)
Tel/Fax Tel: (02) 9839 4000  Fax: (02) 9674 6225
Other New Zealand: Asia Pacific Specialty Chemicals (NZ) Limited
Information 119 Carbine Road
             Mt Wellington, Auckland 6
             Emergency Tel: 0800 243 622 (24H)
             Telephone: (09) 276 4019
             Fax: (09) 276 7231

IDENTIFICATION

Product Code TECH 00005572
Product Name MANGANOUS SULPHATE
Proper Shipping Name None Allocated

Other Names

Name
MANGANESE (II) SULPHATE (MANGANOUS SULPHATE)
MANGANOUS SULPHATE MONOHYDRATE
MANGANESE (II) SULPHATE MONOHYDRATE
Manganese sulfate
Manganous sulphate
Manganese sulfate
Manganese (II) sulphate-4-water

Product Code
636
UL 00000298
AR 00000309

UN Number None Allocated
DG Class None Allocated
Packing Group None Allocated
Hazchem Code None Allocated
Poisons Not Scheduled
Schedule
Product Use Used as a nutrient and/or dietary supplement and as a trace mineral added to animal feeds.

Physical Data

Appearance Reddish/pink crystals.
Melting Point 700 deg C; decomposes at 850 deg C
Boiling Point No Data
Vapour Pressure No Data
Specific Gravity 3.25
Flash Point No Data
LEL Solubility in Water 762 g/L @ 20°C

Other Properties

pH Value 3.0-3.5 (20°C @ 50 g/L H2O)
Decomposition Temperature > 117°C
Stability Haz. Stable under normal conditions.
Polymerization Will not occur.
Formula Mn SO4. H2O
Molecular Weight 169.01

Ingredients

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>Name</th>
<th>CAS</th>
<th>Proportion</th>
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<tbody>
<tr>
<td></td>
<td>Manganese (II) sulphate monohydrate</td>
<td>7785-87-7</td>
<td>100 %</td>
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HEALTH HAZARD INFORMATION

Health Effects

Acute - Swallowed The material may irritate the gastrointestinal tract. Acute poisoning by ingestion causes stomach upset, sickness, lethargy and possible coma.
Acute - Eye May be an eye irritant.
Acute - Skin The material may irritate the skin.
Acute - Inhaled Inhalation may cause nose irritation, and sneezing with possible nose bleeds. Manganese compounds are common air contaminants.
Chronic Prolonged or repeated ingestion or inhalation is harmful. Inhalation may cause inflammation of the respiratory tract, possible frequent nose bleeding, headache, sleep disturbances, dermatitis, irritability and liver enlargement followed by progressive deterioration of the central nervous system, similar to Parkinsonian Syndrome (weakness of legs, increase muscle tension, hand tremor, slurred speech, muscle cramps, spastic gait, mental deterioration, sexual disturbances and various blood changes). Individuals exposed to dusts and fumes of manganese have been reported to suffer from a much higher incidence of upper respiratory infections and pneumonia than does the general population. It has not yet been possible to prove that a definite pneumonitis results in humans exposed to manganese dusts or fumes under industrial conditions. However, experiments with mice have produced definite and striking lung pathology which varied in intensity with the length of exposure to the dust. Exposure to heavy concentrations of dusts or fumes for as little as 3 months may produce the condition, but usually cases develop after 1-3 years of exposure. The CNS is the chief site of damage. If cases are removed from exposure shortly after the appearance of symptoms, some improvement in the patient’s condition frequently occurs, though there may be some residual disturbance in gait and speech. When well established, however, the disease results in permanent disability.
First Aid

Swallowed
Wash out the mouth thoroughly, then give water to drink and obtain immediate medical assistance.

Eye
Immediately irrigate with copious quantity of water for at least 15 minutes. Eyelids to be held open. Seek medical attention.

Skin
Remove any contaminated clothing and wash the affected area with water, then soap and water. If exposure has been prolonged or severe, seek medical advice.

Inhaled
If dust has been inhaled, the patient should be removed to fresh air and allowed to rest while medical assistance is being sought.

First Aid Facilities
Eye wash and normal washroom facilities.

Advice to Doctor

Advice to Doctor
Early administration of EDTA can hasten recovery, but it is of little value in cases of long standing.

Other Health Hazard Information

PRECAUTIONS FOR USE

Other Exposure Info.
TLV (as Mn): 5 mg / m³ for both long and short term exposure.
Natural ventilation should be sufficient, under normal conditions of use. However where dust is generated the use of a mechanical exhaust ventilation system is recommended.

Eng. Controls
Natural ventilation should be sufficient, under normal conditions of use. However where dust is generated the use of a mechanical exhaust ventilation system is recommended.

Personal Protection

Protective Equip.
Normal standards of LABORATORY protective clothing and cleanliness including effective eye protection and dust mask, if dust is likely to be a problem.
INDUSTRIAL Overalls, rubber gloves and effective eye protection. Wear a dust mask if dusts are likely to be encountered.

Flammability

Fire Hazards
Non flammable.

SAFE HANDLING INFORMATION

Storage and Transport

Storage
Store in a cool, dry place.
Reasonably stable on storage.

Precautions
Not classified as a Dangerous Good, according to the Australian Code for the Transport of Dangerous Goods by Road and Rail.

Transport
Proper
Spills and Disposal

Laboratory quantities may be washed to drain with large quantities of water.
Remove all sources of ignition. Increase ventilation. Evacuate all unnecessary personnel.
Wear respiratory protection as specified in the Protective Equipment section of this MSDS.
Dampen spilled material with water to avoid airborne dust, then transfer material to a suitable container.
Use absorbent paper dampened with water to pick up remaining material.
Wash surfaces well with soap and water. Seal all wastes in vapour tight labelled plastic containers for eventual disposal. If large quantities of this material enter the waterways contact the Environmental Protection Authority, or your local Waste Management Authority.
Dispose of in accordance with all Local, State, and Federal regulations.

Fire/Explosion Hazard

Not flammable.
Oxides of sulphur.
Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.
Use water as a low pressure jet, and ensure that the solution drains away from the scene of the fire or use foam or carbon dioxide fire extinguishers. The use of fire extinguishers of the CHLORINATED hydrocarbon type is NOT RECOMMENDED, as toxic products will probably be produced by the decomposition of the extinguishing medium when it comes into contact with hot manganese compounds.

Hazardous Reaction
Sulphates react violently with aluminium and magnesium.

Hazchem Code
None Allocated

OTHER INFORMATION

Toxicology
No information available.
No data supplied.
R48/20/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation and if swallowed.
S22 Do not breathe dust.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Safety Statement
Harmful

Hazard Category
Mn SO4. H2O

CONTACT POINT

Australia: Business Hours: Mr Paul Verren
Telephone: (02) 9839 4024
After Hours: 1800 022 037
New Zealand: Business Hours: Mr Lloyd Williams
Telephone: (09) 276 4019
Emergency Tel: 0800 243 622
IMPORTANT ADVICE:
This MSDS summarises our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace including its use in conjunction with other products. If clarification or further information is needed to ensure that an appropriate risk assessment can be made, the user should contact Asia Pacific Speciality Chemicals. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.

End of MSDS