



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Hi-Yield Manganese Sulfate

SECTION 1: Identification

GHS Product identifier

Product name	Hi-Yield Manganese Sulfate
Product number	34335
Brand	Hi-Yield

Recommended use of the chemical and restrictions on use

Fertilizer

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA
Telephone	855-270-4776

Emergency phone number

In the event of a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

- Specific target organ toxicity (repeated exposure), Cat. 2
- Eye damage/irritation, Cat. 1

GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H373

May cause damage to organs [organs] through prolonged or repeated exposure [route]

H318

Causes serious eye damage

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Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapors/spray.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to ...
P280	Wear eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor/...
P102	Keep out of reach of children.
P103	Read label before use.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Manganese (II) sulfate monohydrate (CAS no.: 10034-96-5)	> 95 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

If inhaled	Remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
In case of skin contact	Wash off immediately with plenty of water. Remove all contaminated clothes and shoes. If skin irritation persists, call a doctor/physician.
In case of eye contact	Immediately rinse with plenty of water. Remove contact lenses, if present and easy to do so. Keep eye wide open while rinsing. Continue rinsing for 15 minutes. Call a doctor/physician if irritation persists.
If swallowed	Do not induce vomiting without medical advice. Rinse mouth with water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed

Symptoms: Chills, fever, nausea, vomiting, coughing, weakness and headaches, skin irritation.

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

Treat symptomatically.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use any means suitable for extinguishing surrounding fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to the release of irritation or toxic gases and vapors; including and not limited to: Sulfur oxides.

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Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Use personal protection recommended in Section 8. Ensure adequate ventilation.

Environmental precautions

Prevent entry into waterways or sewers.

Methods and materials for containment and cleaning up

Sweep or vacuum up and place in an appropriate closed container. Keep unauthorized personnel away. Avoid generating dust.

Reference to other sections

Section 8

SECTION 7: Handling and storage

Precautions for safe handling

Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear personal protective equipment recommended in section 8. Wash thoroughly after handling. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

Store in a cool/low-temperature, well-ventilated, dry place. Keep containers closed and labeled when not in use.

SECTION 8: Exposure controls/personal protection

Control parameters

1. Manganese (II) sulfate monohydrate (CAS: 10034-96-5)

TWA: 0.2 mg/m³ (ACGIH)

TWA: 1 mg/m³ (NIOSH)

STEL: 3 mg/m³ (NIOSH)

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Consider the potential hazards of this material, applicable exposure limits, job activities and other substances in the workplace when designing controls and selecting personal protective equipment.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Safety glasses are recommended in professional settings.

Skin protection

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Choose the appropriate protective clothing and gloves based on the tasks being performed to avoid exposure to skin.

Wear protective gloves. Wear long sleeved protective clothing.

Body protection

Do not eat, drink or smoke during use.

Respiratory protection

Not required under normal circumstances. If exposure limits are exceeded or if irritation or other symptoms are experienced use a NIOSH/MSHA approved respirator.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	White granules
Odor	Odorless
Odor threshold	None
pH	No information available.
Melting point/freezing point	1292°F
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapor pressure	No information available.
Vapor density	No information available.
Relative density	2.95g/cm ³
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity	No information available.

Additional properties

Physical state	Solid
Color	White

SECTION 10: Stability and reactivity

Reactivity

None known under normal conditions.

Chemical stability

Stable under ordinary conditions of use and storage.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Avoid dust formation.

Incompatible materials

Strong bases.

Hazardous decomposition products

Hazardous combustion can lead to the release of irritating gases and vapors.

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SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

MANGANESE (II) SULFATE MONOHYDRATE

LD50 Oral - >2,000 mg/kg

Skin corrosion/irritation

May cause skin irritation.

Serious eye damage/irritation

May cause eye irritation.

Respiratory or skin sensitization

May cause irritation of respiratory tract.

Germ cell mutagenicity

Not available.

Carcinogenicity

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 additional information.

Specific target organ toxicity (STOT) - single exposure

No information available.

Specific target organ toxicity (STOT) - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

No information available.

SECTION 12: Ecological information

Toxicity

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Processing, use, or contamination of this product may occur during product use. Accordingly, it is the responsibility of the user to determine the proper disposal methodologies. Consult the appropriate state, regional or local regulations to ensure complete and accurate classification. Dispose of contaminated packaging in accordance with local regulations.

SECTION 14: Transport information

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DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

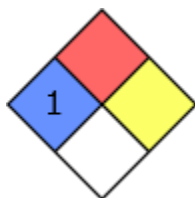
SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

SARA 313 Components

Product name: Hi-Yield Manganese Sulfate

NFPA Rating



SECTION 16: Other information

Further information/disclaimer

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