VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet
Hi-Yield Manganese Sulfate

SECTION 1: Identification

Product identifier

Product name	Hi-Yield Manganese Sulfate
Product number	32335, 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(s)

In the event or 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)

- Specific target organ toxicity (repeated exposure) (C.4.12), Cat. 2

GHS label elements, including precautionary statements

Pictogram



Signal word **Warning**

Hazard statement(s)

H373	May cause damage to organs through prolonged or repeated exposure

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 in accordance with Federal, State and local regulations.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
MANGANESE (II) SULFATE MONOHYDRATE (CAS no.: 10034-96-5	**> 95 % (weight)**
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

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

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.

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
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.

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

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	White Granules
Odor	Odorless
Odor threshold	
pH	
Melting point/freezing point	1292 ºF
Initial boiling point and boiling range	
Flash point	
Evaporation rate	
Flammability (solid, gas)	
Upper/lower flammability limits	
Vapor pressure	
Vapor density	
Relative density	
Solubility(ies)	Soluble in water
Partition coefficient: n-octanol/water	
Auto-ignition temperature	
Decomposition temperature	
Viscosity	
Explosive properties	
Oxidizing properties	

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.

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

STOT-repeated exposure
May cause damage to organs through prolonged or repeated exposure

SECTION 12: Ecological information

Toxicity
Should not be released to environment. Toxic to aquatic life.

Persistence and degradability
No data available.

Bioaccumulative potential
No data available.

Mobility in soil
No data available.

Results of PBT and vPvB assessment
No data available.

Other adverse effects
No data available.

SECTION 13: Disposal considerations

Disposal of the product
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

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
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains the following compounds which are subject to the reporting requirements of the Act and 40 CFR, Part 372: Manganese compounds >95%

NFPA Rating



SECTION 16: Other information