



**VOLUNTARY PURCHASING GROUPS, INC.**

## Safety Data Sheet Hi-Yield Soil Sulfur

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### SECTION 1: Identification

#### GHS Product identifier

Product name	Hi-Yield Soil Sulfur
Product number	33685; 34185
Brand	Hi-Yield
Substance name	Sulfur

#### Recommended use of the chemical and restrictions on use

Soil amendment

#### 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

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### SECTION 2: Hazard identification

#### General hazard statement

Powdered sulfur may be considered a nuisance dust by the ACGIH. As such workplace exposures should not exceed 10 mg/m<sup>3</sup>.

#### Classification of the substance or mixture

- Eye damage/irritation, Cat. 1
- Flammable solids, Cat. 1
- Skin corrosion/irritation, Cat. 2

#### GHS label elements, including precautionary statements

#### Pictograms



#### Signal word

**Warning**

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### Hazard statement(s)

H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H228	Flammable solid
H290	May be corrosive to metals
H303	May be harmful if swallowed
H316	Causes mild skin irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H315	Causes skin irritation

### Precautionary statement(s)

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling and before eating.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363	Wash contaminated clothing before reuse.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P405	Store locked up.
P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P370+P378	In case of a fire, use water fog, spray, or regular foam to extinguish. Do not use a direct water stream.
P302+P352	IF ON SKIN: Wash with plenty of water/...
P321	Specific treatment (see ... on this label).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.

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## SECTION 3: Composition/information on ingredients

### Mixtures

Substance name: Sulfur; Formula: S; Molecular weight: 32.07

Other names / synonyms: Sulfur

### Hazardous components

Component	Concentration
Sulfur (CAS no.: 7704-34-9)	90 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

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## SECTION 4: First-aid measures

### Description of necessary first-aid measures

General advice	Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur.
If inhaled	Move victim to fresh air. Watch for signs of an allergic reaction. Use a bronchodilator inhaler if directed by asthma patient. Keep victim warm and quiet. If not breathing, give artificial respiration. If heart

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has stopped beating, start cardiopulmonary resuscitation (CPR). SEEK MEDICAL ATTENTION.

In case of skin contact	Wash skin thoroughly with mild soap and water. Wash exposed clothing separately before reuse.
In case of eye contact	Immediately flush eyes with plenty of water for 15 minutes, while holding upper and lower lid apart to insure rinsing of entire eye surface and lids. Do not use boric acid to rinse with. FOR SEVERE IRRITATION, SEEK MEDICAL ATTENTION, preferably an ophthalmologist.
If swallowed	Give one tablespoon of Syrup of Ipecac to induce vomiting. If vomiting does occur, give fluids again. If vomiting has not occurred in twenty minutes, the same dose of Syrup of Ipecac may be repeated one additional time. Alternatively, vomiting may be induced by touching the back of the throat with a finger. Do not give anything by mouth to an unconscious or convulsing person. SEEK MEDICAL ATTENTION

### Most important symptoms/effects, acute and delayed

No information available.

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

Individuals with known allergies to sulfide drugs may also have allergic reactions to elemental sulfur.

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## SECTION 5: Fire-fighting measures

### Suitable extinguishing media

Water fog, spray, or regular foam. Do not use a direct water stream.

### Specific hazards arising from the chemical

Do not use solid streams of water, which could create sulfur dust clouds and cause an explosion or could move burning sulfur to adjacent areas.

Fire will rekindle until mass is cooled below 310°F (154°C). Cool surrounding areas with water fog to prevent re-igniting. Sulfur dust is HIGHLY FLAMMABLE. If suspended in air, it will ignite by friction, static electricity, heat, sparks, or flames. Sulfur dust clouds may explode.

### Special protective actions for fire-fighters

Firemen exposed to contaminated smoke should be immediately relieved and checked for symptoms of exposure of toxic gases. This should not be mistaken for heat exhaustion or smoke inhalation. SEEK MEDICAL ATTENTION IMMEDIATELY.

### Further information

Combustion Products:  
Sulfur oxide gases.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Minor spills such as torn or ruptured containers should be repaired or patched with tape if possible. Place spilled material in a disposable container. Avoid getting dust in eyes.

### Environmental precautions

Do not allow runoff to enter lakes or waterways.

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### Methods and materials for containment and cleaning up

Gently sweep or shovel up spilled material using a natural fiber broom and/or aluminum shovel to prevent sparking, to avoid creating a dust cloud. Place sweepings in an appropriate chemical waste container for reclaiming or disposal in an approved facility. Wash spill site after clean-up is complete.

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## SECTION 7: Handling and storage

### Precautions for safe handling

All handling and conveying equipment should be properly grounded and bonded. Be careful not to create dust. Avoid any conditions that might tend to create a dust explosion. Maintain good housekeeping practices to minimize dust build-up and dispersion. Eliminate sources of ignition. Keep away from heat, sparks, and flames. Use nonferrous tools, when available, to reduce sparking. Gently sweep or shovel up spilled materials using a natural fiber broom and/or aluminum shovel to prevent sparking. Maintain adequate ventilation in all areas.

### Conditions for safe storage, including any incompatibilities

Containers should be stored in a cool, dry, well-ventilated area. Keep container tightly closed. Store away from flammable materials, sources of heat, flames, and sparks. Separate from chlorates, nitrates, and other oxidizing agents. Exercise due caution to prevent damage to or leakage from container.

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## SECTION 8: Exposure controls/personal protection

### Appropriate engineering controls

Maintain adequate ventilation in all areas. No flares or flames in area. Be careful not to create dust. Eliminate sources of ignition.

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

#### Eye/face protection

Wear suitable, protective safety glasses to prevent eye irritation from dust.

#### Skin protection

Wear suitable, protective clothing to prevent skin irritation from dust. Wash skin thoroughly after handling and before eating or smoking. Wash contaminated clothing separately before reuse.

#### Respiratory protection

Wear dust masks and use NIOSH/MSHA approved dust respirator if airborne concentrations exceed exposure limits.

#### Environmental exposure controls

Follow best practice for site management and disposal of waste. Avoid release to the Controls environment.

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## SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	Solid
Odor	Odorless, or faint odor of rotten eggs
Odor threshold	No data available.
pH	No data available.
Melting point/freezing point	117
Initial boiling point and boiling range	444
Flash point	207°C (405 °F) Closed Cup
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	Upper: 6.38% (v) Lower: 0.17% (v)
Vapor pressure	8 mmHg at 246°C (475°F) 1 mmHg at 183.8°C (362.8°F)
Vapor density	No data available.

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Relative density	No data available.
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

### Additional properties

Physical state	Solid
Color	Unknown
Explosive properties	No data available.
Oxidizing properties	No data available.

### Further safety characteristics (supplemental)

No data available.

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## SECTION 10: Stability and reactivity

### Chemical stability

Stable

### Possibility of hazardous reactions

Oxidizing agents may react violently.

### Conditions to avoid

Keep from heat sources, sparks, and open flames

### Incompatible materials

Oxidizing agents, copper, copper alloys, steel, chlorates, nitrates.

### Hazardous decomposition products

Oxides of sulfur gases produced by burning sulfur.

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## SECTION 11: Toxicological information

### Information on toxicological effects

#### Acute toxicity

LD50

Oral: >5050 mg/kg (rats)

Dermal: >2020 mg/kg (rats)

LC50

Inhalation @ 90%: >5.49-mg/L air concentration (rats)

Skin

Slightly irritating (rabbits)

Eye

Minimal irritation in non-washed eyes (rabbits)

#### Skin corrosion/irritation

No adverse effects. Skin irritation may be aggravated in persons with existing skin lesions.

#### Serious eye damage/irritation

Sulfur dust is an eye irritant.

#### Respiratory or skin sensitization

Prolonged inhalation may cause irritation of respiratory tract. Breathing of dust may aggravate asthma and other pulmonary diseases.

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### Germ cell mutagenicity

Not Established

### Carcinogenicity

Not Established

### Reproductive toxicity

Not Established

### Summary of evaluation of the CMR properties

No data available.

### Specific target organ toxicity (STOT) - repeated exposure

Skin sensitization has been observed in some people after repeated exposures to sulfur dust. Chronic inhalation may cause bronchopulmonary disease which may be complicated by emphysema and bronchiectasis. No evidence for carcinogenicity of sulfur according to NTP, IARC, NIOSH, OSHA, or ACGIH. IARC has determined that there is "limited" evidence that crystalline silica is a carcinogen.

### Additional information

Toxicity

LD50

Oral: >5050 mg/kg (rats)

Dermal: >2020 mg/kg (rats)

LC50

Inhalation @ 90%: >5.49-mg/L air concentration (rats)

Skin

Slightly irritating (rabbits)

Eye

Minimal irritation in non-washed eyes (rabbits)

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## SECTION 12: Ecological information

### Toxicity

No data available.

### 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

Toxicity to Fish

LC50

Oncorhynchus mykiss (rainbow trout) -> 180 mg/l -96h

LC50

Other fish -866 mg/l -96h

Toxicity to Daphnia and Other Aquatic Invertebrates

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EC50

Daphnia magna (Water flea) -> 5,000 mg/l -48h

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### SECTION 13: Disposal considerations

#### Disposal methods

##### Product disposal

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

##### Packaging disposal

Dispose of content and/or container in accordance with local, regional, national and/or international regulations.

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### SECTION 14: Transport information

#### DOT (US)

Not dangerous goods

#### IMDG

Not dangerous goods

#### IATA

Not dangerous goods

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### SECTION 15: Regulatory information

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

##### Pennsylvania Right To Know Components

Chemical name: Sulfur

CAS number: 7704-34-9

##### New Jersey Right To Know Components

Common name: Sulfur

CAS number: 7704-34-9

##### Toxic Substances Control Act (TSCA) Inventory

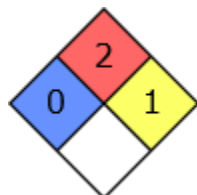
This product is listed on the TSCA Inventory at CAS Registry Number 7704-34-9

##### CERCLA

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

If this product is accidentally spilled, it is not subject to any special reporting. We recommend that you contact state and local authorities to determine if there are other local reporting requirements.

#### NFPA Rating



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### SECTION 16: Other information

#### Further information/disclaimer

## **Safety Data Sheet**

### **Hi-Yield Soil Sulfur**

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