

Agrotek Vaporized Sulphur

SECTION 1. IDENTIFICATION

Product Identifier	Agrotek Vaporized Sulphur
Other Means of Identification	Sulfur-Bentonite
Other Identification	n/a
Product Family	Grotek
Recommended Use	Fungicide.
Restrictions on Use	Not applicable.
Manufacturer/Supplier Identifier	Greenstar Plant Products Inc., #284, Unit:505 - 8840-210th Street, Langley, British Columbia, V1M 2Y2, info@getgreenstar.com, 604-882-7699, www.grotek.com
Emergency Phone No.	CHEMTREC, 1-800-424-9300 / +1-703-527-3887 (24/7, 365 days/year)
SDS No.	0115

SECTION 2. HAZARD IDENTIFICATION

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

Classification

Combustible dust - Category 1; Skin irritation - Category 2; Eye irritation - Category 2B

Label Elements



Warning

Keep out of reach of children.

May form combustible dust concentrations in air.

Causes eye irritation.

Causes mild skin irritation.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

IF ON SKIN: Wash with plenty of water.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

IF exposed or concerned: Get medical advice or attention.

Store in a cool, dry location, out of direct sunlight. Protect from frost and other climatic extremes. Secure lid between uses.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Product Identifier:	Agrotek Vaporized Sulphur - Ver. 1
Date of Preparation:	January 18, 2019
Date of Last Revision:	August 14, 2019

Substance:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
Sulfur	7704-34-9	~90	N/A	Elemental sulphur
Bentonite	1302-78-9	~10	N/A	N/A

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove source of exposure or move to fresh air. Keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

Eye Contact

Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion

Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical advice or attention if you feel unwell or are concerned.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

Most Important Symptoms and Effects, Acute and Delayed

None known.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Use water, water mist, water fog, dirt, sand, or a carbon dioxide blanket to extinguish a fire.

Unsuitable Extinguishing Media

Not applicable.

Specific Hazards Arising from the Product

Can ignite if strongly heated. Heating increases the release of toxic vapour.

In a fire, the following hazardous materials may be generated: toxic chemicals. sulfur dioxide.

Special Protective Equipment and Precautions for Fire-fighters

Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Ensure cleanup is conducted by trained personnel only. Wear adequate personal protective equipment.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Review Section 7 (Handling) of this safety data sheet before proceeding with clean-up. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up.

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SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid generating dusts. Do not get in eyes, on skin or on clothing. Only use where there is adequate ventilation. Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs.

Conditions for Safe Storage

Store away from incompatible materials (see Section 10 of the SDS). Store in a cool, dry location, out of direct sunlight. Protect from frost and other climatic extremes. Secure lid between uses.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
Sulfur	10 mg/m3 Nuisance dust		5 mg/m3 Respirable dust			

Appropriate Engineering Controls

In a confined space: use local exhaust ventilation, if general ventilation is not adequate to control amount in the air. Provide eyewash and safety shower if contact or splash hazard exists.

Individual Protection Measures

Eye/Face Protection

Not required but it is good practice to wear safety glasses or chemical safety goggles.

Skin Protection

In case of an emergency (e.g. an uncontrolled release): wear chemical protective clothing e.g. gloves, aprons, boots. Not required, if used as directed.

Respiratory Protection

A NIOSH (US) or CSA (Canada) approved dust mask or filtering facepiece is recommended for worker comfort in poorly ventilated areas. Use a particulate filter respirator for particulate concentrations exceeding the Occupational Exposure Limit.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

Appearance	Green - yellow granular.
Odour	Rotten eggs
Odour Threshold	Not available
pH	Not applicable
Melting Point/Freezing Point	111 - 119 °C (231 - 246 °F) (melting); Not applicable (freezing)
Initial Boiling Point/Range	444.6 °C (832.3 °F)
Flash Point	207 °C (405 °F) (closed cup) (Sulfur)
Evaporation Rate	Not applicable
Flammability (solid, gas)	Combustible dust (Sulfur)
Upper/Lower Flammability or Explosive Limit	Not available (upper); Not available (lower)
Vapour Pressure	Not available
Vapour Density (air = 1)	2.07 (estimated)
Relative Density (water = 1)	Not available
Solubility	Insoluble in water; Not available (in other liquids)

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Partition Coefficient, n-Octanol/Water (Log Kow)	Not available
Auto-ignition Temperature	~ 248 °C (478 °F)
Decomposition Temperature	Not available
Other Information	
Molecular Weight	32.06

SECTION 10. STABILITY AND REACTIVITY

Reactivity

None known.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Generation of dust.

Incompatible Materials

Strong oxidizing agents (e.g. perchloric acid).

Hazardous Decomposition Products

Very toxic, flammable hydrogen sulfide.

SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

Likely Routes of Exposure

Inhalation; skin contact; eye contact; ingestion.

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Sulfur	> 0.047 mg/L (rat) (4-hour exposure)	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)

Skin Corrosion/Irritation

Human experience and animal tests show mild irritation.

Serious Eye Damage/Irritation

Human experience and animal tests show mild irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Skin Absorption

No information was located.

Ingestion

If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

Aspiration Hazard

Not known to be an aspiration hazard.

Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer. Not known to be a skin sensitizer.

Carcinogenicity

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Not a carcinogen.

Reproductive Toxicity

Development of Offspring

No information was located.

Sexual Function and Fertility

No information was located.

Effects on or via Lactation

No information was located.

Germ Cell Mutagenicity

No information was located.

Interactive Effects

No information was located.

SECTION 12. ECOLOGICAL INFORMATION

Not hazardous to the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Recycle and reuse product, if possible. Dispose of contents and container in accordance with local, regional, national and international regulations.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL or are not required to be listed.

CEPA - National Pollutant Release Inventory (NPRI)

Not specifically listed.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

Listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By	Regulatory
Phone No.	604-882-7699
Date of Preparation	January 18, 2019
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References	CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for

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Occupational Health and Safety (CCOHS). NIOSH Pocket Guide database. National Institute for Occupational Safety and Health. Available from Canadian Centre for Occupational Health and Safety (CCOHS).

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