



SAFETY DATA SHEET

AGSUL 90

Identification of the Material & Supplier

Product Name: AGSUL 90
Other Names: Dispersable Sulphur, Sulphur Bentonite
Recommended Use: Fertilizer
Supplier: Summit Fertilizers
29 Ocean St
Kwinana Beach WA 6167
Telephone: 9439 8999

Hazards Identification

Hazards Classification: AGSUL 90 is not classified as hazardous according to NOHSC criteria
Risk Phrase: AGSUL 90 is not classified as a Dangerous Good according to the ADG Code

Composition/Information on Ingredients

Chemical Identity: Sulphur + Bentonite clays
Proportion of Ingredients: 90% Sulphur
10% Bentonite clays
CAS Number: Sulphur: 7704-34-9
Bentonite: Not available

First Aid Measures

Eye Contact: Immediately flush with fresh water for at least 15 minutes. Hold eyes open while flushing with water. Seek medical attention if irritation persists.
Skin Contact: Immediately remove contaminated clothing and shoes. Flush skin with fresh water for at least 15 minutes. Use soap if available or follow by flushing with soap and water. Do not reuse contaminated clothing without laundering. Seek medical attention if irritation persists.
Inhalation: Remove victim to fresh air. If breathing is difficult, give oxygen. If not breathing, administer artificial respiration. Seek medical attention immediately.
Ingestion: If victim is conscious and alert, give plenty of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek medical attention immediately.

Fire Fighting Measures

Flammability: Product is combustible, potentially explosive dust when exposed to ignition source.
Suitable Extinguishing Media: Water fog or special mixtures of dry chemical.
Hazards from Combustion Products: May evolve toxic gases (sulphur oxides) when heated to decomposition. Toxic hydrogen sulphide may be generated from molten sulphur.
Hazchem Code: None allocated.



Accidental Release Measures

Emergency Procedures	Isolate the area and deny entry to nonessential personnel. Emergency responders and/or clean up personnel should wear appropriate protective clothing and equipment.
Methods and Materials for Containment & Cleanup	Prevent from entering drains or waterways. Collect material promptly. Minimise dust generation during clean up operation.

Handling & Storage

Precautions for Safe Handling	Avoid dust in the eyes, skin contact and inhalation. Maintain proper hygiene standards by washing thoroughly after handling product. Combustible.
Conditions for Safe Storage	Store in a cool, dry, well ventilated location free of heat and ignition sources.
Storage Incompatibilities	Oxidizing agents, halogens, carbides, ammonia, metals, direct sunlight, heat or ignition sources and foodstuffs.

Exposure Controls/Personal Protection

National Exposure Controls	No specific official limit. NOHSC recommended value for inhalable particulate TWA: 10mg/m ₃
Engineering Controls	Avoid dusty areas.
Personal Protective Equipment	Wear gloves, long sleeve shirt and long trousers to prevent skin contact. In dusty areas use a Type E – P2 (sulphur dioxide and particulate) respirator and wear chemical safety glasses to prevent eye contact.

Physical & Chemical Properties

Appearance	Brown or yellow granulated solid material.
Odour	Slight odour.
pH of 10% Solution	
Vapour Pressure	< 10 mm Hg @ 20°C
Boiling Point	444°C
Melting Point	112 – 119°C
Solubility	Insoluble
Specific Gravity	1.04 – 2.07
Bulk Density	1.0 t/m ³

Stability & Reactivity

Stability	Stable under normal temperatures and pressures
Reactivity	
Incompatible Materials	Oxidizing agents, halogens, carbides, ammonia, metals, direct sunlight, heat or ignition sources and foodstuffs.
Decomposition Products	SO _x



Toxicological Information

Health Effects

The hazard associated with exposure to sulphur is when hydrogen sulphide and sulphur dioxide are formed during heating. Hydrogen sulphide irritates the eyes and respiratory tract at low concentrations and is a rapidly acting systemic poison which may cause respiratory paralysis and asphyxia at high concentrations. Sulphur dioxide is a severe irritant to the eyes, mucous membranes and, to lesser extent, the skin. Sulphur dioxide irritancy is due to the formation of sulphurous acid when in contact with moist surfaces. Experimental tumours and birth defects have been reported following exposure to sulphur dioxide, and respiratory paralysis and pulmonary oedema may occur at high concentrations.

- Eye
 - eye irritation reported at 8ppm
- Inhalation
 - sulphur is regarded as a nuisance dust. Prolonged exposure may result in mucous membrane irritation of the nose and throat and possible lung damage. The main concern arises during heating when toxic sulphur dioxide (TWA 2ppm) & hydrogen sulphide (TWA 10ppm) may be formed.
 - Low irritant to skin in powder/dust form. When heated to molten state, sulphur may burn upon direct contact and toxic sulphur oxides and hydrogen sulphide fumes may be evolved.
- Skin
 - Relatively low toxicity. Large doses (10-20g) may result in sulphides being formed due to bacterial effects within the colon which may cause irritation and kidney damage.
- Ingestion

Toxicity Data

Sulphur: LDLo (ingestion): 175mg/kg (rabbit)
Sulphur: LC50 (inhalation): 1,660 mg/m³ (mammal)

Ecological Information

Ecotoxicity

Naturally occurring element.

Mobility

Insoluble. Cannot be transported downward to the groundwater.

Persistence & Degradability

Sulphur is oxidized by microbial species in the soil. Plants are able to utilize the oxidized forms of sulphur. The oxidation rate is controlled by temperature, moisture content and soil aeration.

Bioaccumulative Potential

No potential for bio-accumulation.

Disposal Considerations

Disposal Methods & Containers

Dispose of on a farm, or authorized waste facility in accordance with statutory requirements. May be broadcast on farm as fertilizer using proper agriculture and soil management.

Transport Information

UN Number

None allocated

UN Proper Shipping Name

None allocated

Class & Subsidiary Risk

None allocated

Packing Group

None allocated

Hazchem Code

None allocated

Regulatory Information

Australian Regulatory Information

A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Drugs and Poisons (SUSDP).

All chemicals listed on the Australian Inventory of Chemical Substances (AICS).



Other Information

Key/Legend

NOHSC	National Occupational Health and Safety Commission
USEPA	United States Environmental Protection Authority
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
ACGIH	American Conference of Government Industrial Hygienists
OECD	Organisation for Economic Cooperation and Development
ES-TWA	Exposure Standard – Time weighted average
ES-STEL	Exposure Standard – Short term exposure level
ES-Peak	Exposure Standard – Peak level
LDLo	The lowest dose in an animal study in which lethality occurred.
LD50	Lethal dose 50. The single dose of a substance that causes death of 50% of an animal population from exposure other than inhalation
t/m3	Tonnes per cubic metre
mg/m3	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Hydrogen ion concentration on a scale of 0-14

Disclaimer

The information contained in this SDS is offered in good faith as accurate but does not purport to be all-inclusive. Health and safety precautions in this SDS may not be adequate for all individuals and/or situations. It is the user's responsibility to determine the suitability of any material for a specific purpose, adopt such precautions as may be necessary and comply with all applicable laws and regulations. Summit Fertilizers reserves the right to make changes to SDS data without notice.