



## SAFETY DATA SHEET

# AGSUL 90

### Identification of Material & Supplier

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

### Hazards Identification

#### Hazards Classification

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road or Rail, NON-DANGEROUS GOODS. Sulphur is not subject to the provisions of the Australia Dangerous Goods Code when it has been formed into a specific shape such as pastilles, pills, granules, pellets or flakes.

This material is hazardous according to Safe Work Australia  
– HAZARDOUSSUBSTANCE

Signal Word:



WARNING

Hazard Statement:H315 Causes Skin Irritation

Prevention:

P264 Wash Hands Thoroughly after handling

P280 Wear Protective Gloves / protective clothing / eye protection / face protection

Response:

P302 & P352 If on skin – wash with plenty of soap and water

P321 Specific treatment (see 1st Aid Measures on SDS)

P332 & P313 If skin irritation occurs then get medical advice/attention

P362 Take off contaminated clothing and wash before re-using

Storage:

No Storage Statements

#### Precaution Statement(s)



## Composition/Information on Ingredients

Chemical Identity	Sulphur + Bentonite clays	
Proportion of Ingredients	90%	Sulphur
	10%	Bentonite clays
CAS Number	Sulphur:	7704-34-9
	Bentonite:	1302-78-9

## First Aid Measures

### Eye Contact

If this product encounters the eyes:

- Wash out immediately with fresh running water.
- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- Seek medical attention without delay; if pain persists or recurs seek medical attention.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

### Skin Contact

If skin or hair contact occurs:

- Flush skin and hair with running water (and soap if available).
- Seek medical attention in the event of irritation.

### Inhalation

If dust is inhaled, remove from contaminated area.

- Encourage patient to blow their nose to ensure clear passage of breathing.
- If irritation or discomfort persists, seek medical attention.

### Ingestion

If the victim is conscious and alert, give a glass 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.

### NOTE

Burns with intense heat. Produces melting, flowing, burning liquid and dense acrid black smoke. Decomposes on heating and produces acrid and toxic fumes of sulphur dioxide (SO<sub>2</sub>).

## Personal Protective Equipment

Gloves (Disposable polythene gloves or Cotton gloves or Light weight rubber gloves), boots (chemical resistant) and Safety glasses with side shields. overall



## 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.

### MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid contact with skin and eyes.
- Control personal contact by using protective equipment.
- Use dry clean up procedures and avoid generating dust.
- Place in a suitable, labelled container for waste disposal.

### MAJOR SPILLS

- Remove all ignition sources.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment and dust respirator.
- Prevent spillage from entering drains, sewers or water courses.
- Recover product wherever possible. Avoid generating dust.
- Sweep / shovel up.
- If required, wet with water to prevent dusting.
- Put residues in labelled plastic bags or other containers for disposal.
- Wash area down with large quantity of water and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

### 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

- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

### Conditions for Safe Storage

- Keep dry.
- Store under cover.
  - Store in a well-ventilated area.
  - Store away from sources of heat or ignition.
  - Observe manufacturer's storing and handling recommendations.

### SUITABLE CONTAINER

- Polyline drum.
- Steel drum with plastic liner.

### 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 inhaling particulate TWA: 10mg/m <sub>3</sub>
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. / Solid, pellet or pastille shape with slight sulfurous odour; insoluble in water
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 <sup>3</sup>

## 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 <sub>x</sub>

## 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.
- Skin	– 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 evolve.
- Ingestion	– 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.
Toxicity Data	Sulphur: LDLo (ingestion): 175mg/kg (rabbit) Sulphur: LC50 (inhalation): 1,660 mg/m <sup>3</sup> (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 bioaccumulation.

### **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 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
	Tonnes per cubic metre
t/m <sup>3</sup>	Milligrams per cubic metre
mg/m <sup>3</sup>	Milligrams per kilogram
mg/kg	Hydrogen ion concentration on a scale of 0-14
pH	

### 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.