



# Safety Data Sheet

## Sulpha90 (Elemental Sulphur)

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### 1. IDENTIFICATION AND SUPPLIER

#### 1.1) Product Identifier

Product Name: Sulpha90  
 Synonym(s): Sulphur Bentonite, Elemental Sulphur, Sulphur 90

#### 1.2) Uses

Intended Use: For Fertiliser

#### 1.3) Supplier Details

Supplier Name: Hortigro Ltd  
 Supplier Address: 164 Manukau Road Pukekohe 2120  
 Supplier Contact: 09 237 1777  
 Supplier Website: [www.hortigro.nz](http://www.hortigro.nz) or [www.landco.nz](http://www.landco.nz)

#### 1.4) Emergency Contact Numbers

National Poisons Information Centre: 0800 POISON (764 766)  
 Emergency (In Storage): 0800 CHEMCALL (243 622)  
 Emergency (In Transit): 111 (Advise of Fire, Ambulance or Police)

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### 2. HAZARDS IDENTIFICATION

#### 2.1) Classification of Substance

Not considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

#### 2.2) Hazard Classification

6.4A Substances that are irritating to the eye

#### 2.3) Secondary Considerations

Fine Sulphur can ignite through friction.

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### 3. COMPOSITION INFORMATION

### 3.1) Substances and Mixtures

Ingredient:	Sulphur
CAS NO:	7704-34-9
Content	90%
Ingredient:	Bentonite
CAS NO:	1330-20-7
Content	10%

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## 4. FIRST AID MEASURES

Eyes:	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by the National Poisons Information Centre, a doctor, or for at least 15 minutes.
Inhalation:	If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.
Skin:	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by the National Poisons Information Centre or a doctor.
Ingestion:	For advice, contact the National Poison Information Centre 0800 764 766 or a doctor (at once). If swallowed, do not induce vomiting. Seek medical attention if symptoms persist.
First aid facilities:	Drinking water and eye-wash bottle should be available.

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## 5. FIRE FIGHTING MEASURES

### 5.1) Extinguishing Media

Fine water spray or fog is recommended. CO2 or dry powder extinguishers for small fires. Small fires may be smothered.

### 5.2) Special hazards arising from the substance or mixture

Flashpoint - 188°C

Explosivity Limits: LEL 35mg/cubic metre, UEL 1400 gm/cu metre (dust)

### 5.3) Advice for Firefighters

Evacuate area and contact emergency services. Toxic gases (Sulphur Dioxide) may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas. Take reasonable steps to minimise creation of Sulphur Dust, Sulphur Dust is flammable.

**5.4) Hazchem Code**  
2Z

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**6. ACCIDENTAL RELEASE MEASURES**

**6.1) Personal precautions, protective equipment and emergency procedures**

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.  
Ventilate area where possible.

**6.2) Environmental precautions**

Prevent product from entering drains and waterways.

**6.3) Methods of cleaning**

Contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust.

**6.4) Reference to other Sections**

See Sections 8 and 13 for exposure controls and disposal.

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**7. HANDLING AND STORAGE**

**7.1) Precautions for safe handling**

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

**7.2) Conditions for safe storage, including any incompatibilities**

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs. Keep out of reach of children.

**7.3) Specific end use(s)**

Intended for use as a fertiliser.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1) Control parameters**

Exposure standards:

For Sulphur Dioxide [SO<sub>2</sub>]. WES TWA: 2.0ppm/5.2 mg/m<sup>3</sup> WES STEL:  
5.0ppm/13 mg/m<sup>3</sup>

Biological limits:

No biological limit values have been entered for this product.

## 8.2) Exposure controls

### Engineering controls

Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Maintain dust levels below the recommended exposure standard.

### PPE

Eye / Face:

Wear dust-proof goggles.

Hands:

Wear PVC or rubber gloves.

Body:

When using large quantities or where heavy contamination is likely, wear coveralls.

Respiratory:

At high dust levels, wear a Class P1 (Particulate) respirator.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1) Information on basic physical and chemical properties

Appearance:	Brown to Grey Split Pea Pastille
Odour:	Slight Sulphurous Odour
Flammability:	Sulphur dust is flammable
Flash point	188°C
Boiling point	444°C
Melting point	119°C
Evaporation rate	Not relevant
pH	Neutral when dry
Vapour density	Not relevant
Specific gravity	1.92 - 2.07 tonne/m <sup>3</sup> (Bulk)
Vapour pressure	Not relevant
Upper explosion limit	Not relevant
Lower explosion limit	Not relevant
Partition coefficient	Not available
Autoignition temperature	Not available
Decomposition temperature	119°C
Viscosity	Not available
Explosive properties	Not available
Oxidising properties	Not available
Odour threshold	Not available

### 9.2) Other information

% Volatiles	Not relevant
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## 10. STABILITY AND REACTIVITY

**10.1) Chemical stability**

Reacts with finely divided metals, alkali metals and mineral acids

**10.2) Possibility of hazardous reactions**

Polymerization is not expected to occur.

**10.3) Conditions to avoid**

Avoid heat, sparks, open flames and other ignition sources.

**10.4) Incompatible materials**

Incompatible with oxidising agents (e.g. hypochlorite's).

**10.5) Hazardous decomposition products**

May evolve toxic gases (Sulphur Oxides) when heated to decomposition.

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**11. TOXICOLOGICAL INFORMATION****11.1) Information on toxicological effects**

Health hazard summary:

May be harmful - irritant. This product may present a hazard with direct eye contact, prolonged skin contact or with dust inhalation at high levels. Chronic effects are not anticipated.

Eye:

Low to moderate irritant. Contact may result in mild irritation, lacrimation and redness.

Inhalation:

Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.

Skin:

Low irritant. Prolonged or repeated contact may result in mild irritation, rash and dermatitis. Dermal LD50 (rat) is > 2000 mg/kg.

Ingestion:

May be harmful. Ingestion may result in gastrointestinal irritation, nausea, vomiting, abdominal pain and diarrhoea. Oral LD50 (rat) is 3000 mg/kg.

Toxicity data:

N/A

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**12. ECOLOGICAL INFORMATION**

## **12.1) Hazard Classifications**

6.4A

## **13. DISPOSAL INFORMATION**

### **13.1) Waste treatment methods**

Product Disposal:

Reuse or recycle where possible or apply excess product at recommended rates to appropriate land.

Packaging (Bulk Bag) Disposal:

Ensure bulk bags are completely empty and recycle where possible.

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## **14. TRANSPORT INFORMATION**

UN Number:	None Allocated
Proper Shipping Name:	None Allocated
Hazard Class:	None Allocated
Packing Group:	None Allocated

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## **15. REGULATORY INFORMATION**

### **15.1) Regulatory Publications Referencing Sulphur Bentonite**

- New Zealand Inventory of Chemicals
  - New Zealand HSNO Act
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## **16. OTHER INFORMATION**

Additional information

**RESPIRATORS:** In general, the use of respirators should be limited, and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken.

Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air-powered or air-supplied respirators should be considered where prolonged or repeated use is necessary.

**EXPOSURE STANDARD:** Exposure standards are established on the premise of an 8-hour work period of normal intensity, under normal climatic conditions and where a 16-hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

**PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:** The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

**HEALTH EFFECTS FROM EXPOSURE:** It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a ChemAlert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.