



## SAFETY DATA SHEET

Product Name **AGSUL 90 SULPHUR BENTONITE**

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Supplier Name** COOGEE CHEMICALS  
**Address** Cnr of Patterson and Kwinana Beach Roads, Kwinana, WA, AUSTRALIA, 6167  
**Telephone** (08) 9439 8200  
**Fax** (08) 9439 8300  
**Emergency** 1800 800 655  
**Email** businessrelations@coogee.com.au  
**Web Site** http://www.coogee.com.au

**Synonym(s)** COOGEE AGSUL 90 • DISPERSIBLE SULFUR • SULPHUR BENTONITE

**Use(s)** INDUSTRIAL APPLICATIONS  
**SDS Date** 13 Jul 2009

### 2. HAZARDS IDENTIFICATION

**NOT CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA**

**NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE**

Not classified as a Dangerous Good for transport. Sulphur is not subject to the Australian Dangerous Goods Code when it has been formed to a specific shape (eg. prills, granules, pellets, pastilles or flakes) as according to Special Provision 242.

Classified as a Dangerous Good for storage in Western Australia only:

UN No: 1350

DG Class: 4.1

Packing Group: III

Hazchem Code: 1Z

<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b>	None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated		

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
SULPHUR	S	7704-34-9	90%
BENTONITE CLAY(S)	Not Available	Not Available	10%

### 4. FIRST AID MEASURES

**Eye** If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.

**Inhalation** If inhaled, remove from contaminated area. To protect rescuer, use a Type BE (Inorganic and acid gas, Sulphur dioxide) respirator or an Air-line respirator where an inhalation risk exists. Apply artificial respiration if not breathing.

**Skin** If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water.

**Ingestion** For advice, contact a Poison Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form.

**Advice to Doctor** Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

<b>Flammability</b>	Flammable. May evolve toxic gases (sulphur oxides) when heated to decomposition. Toxic hydrogen sulphide may be generated from molten sulphur. Dust may form explosive mixtures with air.
<b>Fire and Explosion</b>	Evacuate area and contact emergency services. Toxic gases 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.
<b>Extinguishing</b>	Water fog or special mixtures of dry chemical. Prevent contamination of drains or waterways.
<b>Hazchem Code</b>	None Allocated

## 6. ACCIDENTAL RELEASE MEASURES

<b>Spillage</b>	Contact emergency services where appropriate. Use personal protective equipment. Clear area of all unprotected personnel. Ventilate area where possible. Eliminate all ignition sources. Avoid generating dust. Contain spillage, then cover / absorb spill with non-combustible absorbant material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.
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## 7. STORAGE AND HANDLING

<b>Storage</b>	Store in a cool, dry, well ventilated area, removed from oxidising agents, halogens, carbides, ammonia, metals, direct sunlight, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should be well ventilated.
<b>Handling</b>	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.

## 8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

<b>Exposure Stds</b>	No exposure standard(s) allocated.
<b>Biological Limits</b>	No biological limit allocated.
<b>Engineering Controls</b>	Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.
<b>PPE</b>	Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. At high dust levels, wear: type E-Class P2 (Sulphur dioxide and Particulate) respirator.



## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	YELLOW-BROWN SOLID	<b>Solubility (water)</b>	INSOLUBLE
<b>Odour</b>	SLIGHT ODOUR	<b>Specific Gravity</b>	1.04 - 2.07
<b>pH</b>	NOT AVAILABLE	<b>% Volatiles</b>	NOT AVAILABLE
<b>Vapour Pressure</b>	< 10 mm Hg @ 20°C	<b>Flammability</b>	FLAMMABLE
<b>Vapour Density</b>	NOT AVAILABLE	<b>Flash Point</b>	207°C
<b>Boiling Point</b>	444°C	<b>Upper Explosion Limit</b>	NOT AVAILABLE
<b>Melting Point</b>	112°C to 119°C	<b>Lower Explosion Limit</b>	NOT AVAILABLE
<b>Evaporation Rate</b>	NOT AVAILABLE		

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## 10. STABILITY AND REACTIVITY

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<b>Chemical Stability</b>	Stable under recommended conditions of storage.
<b>Conditions to Avoid</b>	Avoid heat, sparks, open flames and other ignition sources.
<b>Material to Avoid</b>	Incompatible (forms explosive/unstable mixtures) with oxidising agents (eg. chlorates, nitrates), halogens (eg. fluorine), carbides, metals, ammonia, heat and ignition sources.
<b>Hazardous Decomposition Products</b>	May evolve toxic gases (sulphur oxides) when heated to decomposition.
<b>Hazardous Reactions</b>	Hazardous polymerization is not expected to occur.

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## 11. TOXICOLOGICAL INFORMATION

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<b>Health Hazard Summary</b>	Low to moderate toxicity - irritant. May evolve highly irritating vapours if heated. Use safe work practices to avoid eye or skin contact and dust/vapour generation - inhalation. Some individuals may experience an allergic reaction.
<b>Eye</b>	Low to moderate irritant. Contact may result in irritation, lacrimation, pain and redness.
<b>Inhalation</b>	Low irritant dust - highly irritating vapours. Over exposure may result in irritation of the nose and throat, with coughing. If heated, pungent, strongly irritating and toxic vapours are evolved. Over exposure may result in breathing difficulties (with asthma-like symptoms), pulmonary oedema and unconsciousness.
<b>Skin</b>	Irritant. Contact may result in irritation, redness, rash and dermatitis.
<b>Ingestion</b>	Low to moderate toxicity. Ingestion may result in gastrointestinal irritation, nausea and vomiting. However, due to product form ingestion is considered unlikely.
<b>Toxicity Data</b>	SULPHUR (7704-34-9) LC50 (Inhalation): 1660 mg/m3 (mammal) LDLo (Ingestion): 175 mg/kg (rabbit)

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## 12. ECOLOGICAL INFORMATION

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<b>Environment</b>	In solid form, sulphur is insoluble and thus cannot be transported downward to the ground water table. Sulphur is oxidized by microbial species in soils. No potential for bioaccumulation.
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## 13. DISPOSAL CONSIDERATIONS

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<b>Waste Disposal</b>	Ensure product is covered with moist soil to prevent dust generation and dispose of to approved Council landfill. Contact the manufacturer if additional information is required.
<b>Legislation</b>	Dispose of in accordance with relevant local legislation.

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## 14. TRANSPORT INFORMATION

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<b>Transport</b>	Not classified as a Dangerous Good for transport. Sulphur is not subject to the Australian Dangerous Goods Code when it has been formed to a specific shape (eg. prills, granules, pellets, pastilles or flakes) as according to Special Provision 242.
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Classified as a Dangerous Good for storage in Western Australia only:  
UN No: 1350  
DG Class: 4.1  
Packing Group: III  
Hazchem Code: 1Z

### NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

<b>Shipping Name</b>	None Allocated			
<b>UN No.</b>	None Allocated	<b>DG Class</b>	None Allocated	<b>Subsidiary Risk(s)</b> None Allocated
<b>Packing Group</b>	None Allocated	<b>Hazchem Code</b>	None Allocated	

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## 15. REGULATORY INFORMATION

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<b>Poison Schedule</b>	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).
<b>AICS</b>	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

## 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 STANDARDS - TIME WEIGHTED AVERAGE (TWA) or WES (WORKPLACE EXPOSURE STANDARD) (NZ): 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).

#### ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EC No - European Community Number.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m3 - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

#### 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 Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert 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.

### Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.

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SDS Date 13 Jul 2009

**End of Report**