1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1. Product Identifier

Product Name: **Wengfu SuStain ®**
Synonyms: 0-0-0-90 ♦ BRIMSTONE 90 ♦ SULPHUR 90 ♦ SULPHUR BENTONITE

1.2. Uses and uses advised against

Uses: Crop nutrient ♦ Fertilizer blend ingredient
Uses advised against: -

1.3. Details of the supplier of the product

Supplier Name: **WENGFU AUSTRALIA PTY LTD**
Address: Level 1, 250 Ingles Street, Port Melbourne, VIC, 3207, AUSTRALIA
Telephone: 1300 936 438
Fax: +61 (0) 3 9999 8701
Email: info@wengfuaustralia.com
Website: www.wengfuaustralia.com/

1.4. Emergency telephone numbers

Emergency: +61 (0) 424 837 788

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLASSIFIED AS HAZARDOUS ACCORDING TO SAFE WORK AUSTRALIA CRITERIA

GHS classifications: Skin Corrosion/Irritant: Category 2

2.2. GHS LABEL ELEMENTS

Signal Word **WARNING**

Pictograms

Hazard Statements
H315 Causes skin irritation.

Prevention statements
P264 Wash thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response statements
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment is advised - see first aid instructions.
P332 + P313 If skin irritation occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before re-use.

Storage statements
None allocated.

Disposal statements
None allocated.

2.3. Other hazards

Avoid ignition sources.

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
SULPHUR	7704-349	231-722-6	90%
BENTONITE	1302-78-9	215-108-5	10%

4. FIRST AID MEASURES

4.1. Description of first aid measures

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

Inhalation If inhaled, remove persons from contaminated area into fresh air.

Skin If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. If irritation develops and persists after washing, seek medical attention.

Ingestion Do not induce vomiting.
For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once).

First aid facilities Eye wash facilities and safety shower should be available.

4.2. Most important symptoms and effects, both acute and delayed

Irritating to skin.

4.3. Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1. Extinguishing media

Water spray, water fog, dry chemical, foam, carbon dioxide.
Use a water spray to blanket the fire and bulk stockpiles, containers and nearby storage areas. Avoid directing solid streams of water at areas where dust has settled as this may result in clouds of sulphur dust being dispersed to the air. Prevent contamination of drains or waterways.

5.2. Special hazards arising from the substance or mixture

Combustible. May evolve sulphur oxides and hydrogen sulphide when heated to decomposition.
Sulphur burns with a pale flame that may be difficult to see during daylight hours, particularly if the humidity is low.
The dust from this product is a flammable solid. It may also form explosive mixtures with air that are easily ignited by heat, sparks and static electricity.

5.3. Advice for firefighters

Evacuate area and contact emergency services. Dusts from this product is a flammable solid. 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.

5.4. Hazchem code

None allocated.

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 spilled product from entering drains or waterways.

6.3. Methods of cleaning up

Recover spilt fertilizers as soon as possible. If in a warehouse and the product has not been contaminated or degraded, return it to the original stockpile. Otherwise, store in a separate bay or containers. If in the open, and the product cannot be immediately recovered, take steps to protect the product from the elements and loss to waterways. Cover the spilt product with a water-proof tarpaulin, weighed down to prevent it being blown off by wind. In agricultural fields, spread any residual fertiliser out over as wide an area as possible. If left too thick, plant growth may be affected or die. Remove from roadways by sweeping / street sweeper.

6.4. Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

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 contact with eyes or skin and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.
Moving Sulphur Bentonite into and out of store in bulk bags is low risk, however risk increases if product is stripped from bags and handled, particularly through blending and bagging equipment, and indoors. Conduct risk assessment on blending and bagging equipment in facilities in which the product is to be handled before use. Identify and eliminate ignition sources and apply engineering controls for explosion resistant design, explosion vents, explosion suppression systems.

7.2. Conditions for safe storage, including any incompatibilities

Fertilisers should be stored in a cool, dry, covered and well-ventilated area. Bulk fertiliser should be stored in bays or piles, on concrete floors and physically apart from other products. If stored in the open, do so for only for short periods keeping the bags covered with a tarpaulin. Fertilisers should not be stored in silos. Do not allow product to come into contact with water from any source including rain, condensation or from the surface on which it is stored. Store fertiliser away from acids, oxidising agents (e.g. hypochlorite), other farm chemicals, insecticides, fungicides, herbicides, grains or foodstuffs. Fertiliser may set in storage, posing a risk of a 'hang up' and engulfment when being removed from a stockpile. Bagged fertilisers should be stored under cover and out of direct sunlight as UV light will degrade woven polypropylene bags. Do not store 1,000 kg bulk bags more than 2 high as this promotes caking. Stockpiles of fertiliser in bags must be stable. Place the bags as close as is reasonably practicable to each other, without causing damage. If stored on pallets, observe and do not exceed the pallet capacity rating. When walking near rows of stacked bags, pedestrians should maintain a distance equal to at least the height of the stacked product. Fertiliser can emit ammonia or other odours. When stored in confined, unventilated spaces, (e.g.: the hold of a ship), oxygen may become depleted. In this situation, ventilate and test atmosphere prior to entry.

7.3. Specific end uses

Fertiliser blend supplement – apply at rate as advised by an agronomist

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Exposure standards

No exposure standards have been entered for this product.

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. Use appropriate safe working procedures to reduce the potential for an inhalation hazard.
PPE	**Eye / Face**	Wear dust-proof goggles.
	Hands	Wear rubber or PVA gloves. Individuals with sensitive skin should consider wearing PVC or rubber gloves.
	Body	When using large quantities, or where heavy contamination is likely, wear coveralls and rubber boots.
	Respiratory	Where inhalation risk exists, wear a Class P1 (Particulate) respirator. At high dust levels, wear a TYPE E (sulphur dioxide) full facepiece respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	SOLID, 4-6MM, TAN PASTILLES
Odour	SUPHUR ODOUR
Flammability	COMBUSTIBLE
Flash point	188°C
Boiling point	444.6°C
Melting point	110.2°C TO 112.8°C
Evaporation rate	NOT APPLICABLE
pH	NOT AVAILABLE
Vapour density	NOT APPLICABLE
Specific gravity	NOT APPLICABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT APPLICABLE
Upper explosion limit	NOT APPLICABLE
Lower explosion limit	NOT APPLICABLE
Partition coefficient	NOT APPLICABLE
Autoignition temperature	232°C
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT APPLICABLE
Explosive properties	NOT EXPLOSIVE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1. Reactivity

Carefully review all information provided in sections 10.2 to 10.6.

10.2. Chemical stability

Stable under recommended conditions of storage.

10.3. Possibility of hazardous reactions

Polymerization is not expected to occur.

10.4. Conditions to avoid

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

10.5. Incompatible materials

Compatible with most commonly used materials.

10.6. Hazardous decomposition products

May evolve sulphur oxides and hydrogen sulphide when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity This product is expected to be of low toxicity. Based on available data, the classification criteria are not met.

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
SULPHUR	>5,000 mg/kg (rat)	> 2,000 mg/kg (rabbit)	1,660 mg/m³ (mammal)

Skin	Not classified as a skin irritant. Prolonged or repeated contact may result in mild irritation, rash or dermatitis.
Eye	Not classified as an eye irritant. Contact may result in mild irritation, lacrimation and redness.
Sensitisation	Not classified as causing skin or respiratory sensitisation.
Aspiration	Not classified as causing aspiration.
Reproductive	Not classified as a reproductive toxin.
Carcinogenicity	Not classified as a carcinogen.
Mutagenicity	Not classified as a mutagen.
STOT – Single	Not classified as causing organ damage from single exposure. However, over exposure may result in irritation of the nose and throat, with coughing.
STOT - Repeated	Not classified as causing organ damage from repeated exposure.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Limited ecotoxicity data was available for this product at the time this report was prepared. Ensure appropriate measures are taken to prevent this product from entering the environment.

12.2. Persistence and degradability

No information provided.

12.3. Bio-accumulative potential

No information provided.

12.4. Mobility in soil

No information provided.

12.5. Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste disposal	Reuse or recycle where possible. Alternatively, ensure product is covered with moist soil to prevent dust generation and dispose of to an approved landfill site. Collect without generating dust. Place in clean, sealed containers and dispose of to an approved landfill site. Contact the manufacturer/supplier for additional information (if required).
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE, IMDG OR IATA

	LAND TRANSPORT (ADG)	SEA TANSPORT IMDG/IMO)	AIR TANSPORT (IATA)
14.1. UN Number	None allocated	None allocated	None allocated
14.2. Proper Shipping Name	None allocated	None allocated	None allocated
14.3. Transport Class	None allocated	None allocated	None allocated
14.4. Packing Group	None allocated	None allocated	None allocated

14.5. Environmental hazards

No information provided.

14.6. Special precautions for user

Hazchem code none allocated

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations / legislation specific for the substance or mixture

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

Classifications Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.
The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Hazard codes Xi Irritant

Risk phrases R38 Irritating to skin

Safety phrases S24 Avoid contact with skin
S28 After contact with skin, was immediately with plenty of water.
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

Inventory listings **AUSTRALIA: AICS (Australian Inventory of Chemical Substances)**
All components are listed on AICS or are exempt.

16. OTHER INFORMATION

Additional information

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES:
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).

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.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:
The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, 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:
Effects of overexposure to dusts can include irritation of the eyes and respiratory tract, pneumoconiosis (dust congested lungs), pneumonitis (lung inflammation), coughing, vomiting, diarrhea, abdominal pain and jaundice.

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; 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 report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)

GHS	Globally Harmonized System
GTEPG	Group Text Emergency Procedure Guide
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m^3	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
Ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
SWA	Safe Work Australia
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status This document has been compiled by Wengfu Australia on information concerning the product which has been provided 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 Wengfu Australia. While all due care has been taken to include accurate and up-to-date information in this Safety Data Sheet, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Wengfu Australia 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.

END OF SDS