

# Safety Data Sheet



## 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

**Product Name:** **SULPHUR BENTONITE**

**Other name(s):** NutraGold; NutraSul.

**Recommended Use of the Chemical and Restrictions on Use** Fertiliser, fertiliser blend ingredient.

**Supplier:** Ixom Operations Pty Ltd  
**ABN:** 51 600 546 512  
**Street Address:** Level 8, 1 Nicholson Street  
East Melbourne Victoria 3002  
Australia

**Telephone Number:** +61 3 9906 3000  
**Emergency Telephone:** **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## 2. HAZARDS IDENTIFICATION

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

This material is hazardous according to Safe Work Australia; **HAZARDOUS CHEMICAL**.

**Classification of the chemical:**  
Skin Irritation - Category 2

**SIGNAL WORD:** WARNING



**Hazard Statement(s):**  
H315 Causes skin irritation.

**Precautionary Statement(s):**

**Prevention:**  
P264 Wash hands thoroughly after handling.  
P280 Wear protective gloves, protective clothing.

**Response:**  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.

**Storage:**  
No storage statements.

# Safety Data Sheet

**Disposal:**

No disposal statements.

**Poisons Schedule (SUSMP):** None allocated.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Components	CAS Number	Proportion	Hazard Codes
Sulfur	7704-34-9	90%	H315
Bentonite	1302-78-9	10%	-

## 4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor.

**Inhalation:**

Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Skin Contact:**

If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

**Eye Contact:**

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

**Ingestion:**

Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Seek medical advice.

**Indication of immediate medical attention and special treatment needed:**

Treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:**

Fine water spray or fog, carbon dioxide or dry chemical powder.

**Specific hazards arising from the chemical:**

Combustible solid. Crushing may form flammable dust clouds in air. For precautions necessary refer to safety data sheet "Dust Explosion Hazards". Dust clouds are readily ignited in air by weak frictional sparks. Moving sulfur may generate static charge. Sulfur burns with a pale blue flame that may be difficult to see in daylight.

**Special protective equipment and precautions for fire-fighters:**

Can melt and flow in a fire situation. If safe to do so, remove containers from path of fire. Keep containers cool with water spray. On burning will emit toxic fumes, including those of oxides of sulfur. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

## 6. ACCIDENTAL RELEASE MEASURES

# Safety Data Sheet



## Emergency procedures/Environmental precautions:

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

## Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Use a spark-free shovel.

## 7. HANDLING AND STORAGE

### Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Avoid handling which leads to dust formation. Take precautionary measures against static discharges.

### Conditions for safe storage, including any incompatibilities:

Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from foodstuffs, seed, herbicides and insecticides. Store away from incompatible materials described in Section 10. Becomes corrosive to metals when stored wet. Keep containers closed when not in use - check regularly for spills.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control Parameters:** No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for particulates:

Dusts not otherwise classified: 8hr TWA = 10 mg/m<sup>3</sup>

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

### Appropriate engineering controls:

Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

### Individual protection measures, such as Personal Protective Equipment (PPE):

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.

# Safety Data Sheet



Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b>	Solid - Pellets or Pastilles
<b>Colour:</b>	Milky Brown
<b>Odour:</b>	Slight Sulphurous
<b>Solubility:</b>	Insoluble in water.
<b>Specific Gravity:</b>	2.07 (water = 1)
<b>Relative Vapour Density (air=1):</b>	>1
<b>Vapour Pressure (20 °C):</b>	<0.0001 mmHg
<b>Flash Point (°C):</b>	207
<b>Flammability Limits (%):</b>	35-1400 g/m <sup>3</sup>
<b>Autoignition Temperature (°C):</b>	Dust clouds: 190°C. Undispersed dust: 220°C.
<b>Melting Point/Range (°C):</b>	119
<b>Boiling Point/Range (°C):</b>	444
<b>pH:</b>	Not applicable

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Reacts with oxidising agents. Reacts with alkalis. Reacts with mineral acids. Reacts with finely divided metals.
<b>Chemical stability:</b>	Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.
<b>Possibility of hazardous reactions:</b>	Dust explosion hazard. Becomes corrosive to metals when stored wet.
<b>Conditions to avoid:</b>	Avoid exposure to heat, sources of ignition, and open flame. Avoid dust generation.
<b>Incompatible materials:</b>	Incompatible with oxidising agents , alkalis , mineral acids , finely divided metals .
<b>Hazardous decomposition products:</b>	Oxides of sulfur.

## 11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

**Ingestion:** Swallowing can result in nausea, vomiting, diarrhoea, and abdominal pain.

# Safety Data Sheet



**Eye contact:** May be an eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.

**Skin contact:** Contact with skin will result in irritation.

**Inhalation:** Breathing in dust may result in respiratory irritation.

**Acute toxicity:**  
Oral LD50 (rat): >8437 mg/kg

**Chronic effects:** No information available for the product.

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Avoid contaminating waterways.

## 13. DISPOSAL CONSIDERATIONS

**Disposal methods:**  
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations.

## 14. TRANSPORT INFORMATION

### **Road and Rail Transport**

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

### **Marine Transport**

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS. Sulphur is not subject to the provisions of the International Maritime Dangerous Goods Code when it has been formed to a specific shape (eg. prills, granules, pellets, pastilles or flakes).

### **Air Transport**

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS. Sulphur is not subject to the provisions of the International Air Transport Association Dangerous Goods Regulations when it has been formed to a specific shape (eg. prills, granules, pellets, pastilles or flakes).

## 15. REGULATORY INFORMATION

### **Classification:**

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

### **Classification of the chemical:**

Skin Irritation - Category 2

### **Hazard Statement(s):**

H315 Causes skin irritation.

**Poisons Schedule (SUSMP):** None allocated.

# Safety Data Sheet



All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

## 16. OTHER INFORMATION

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

**Reason(s) for Issue:**

Revised Primary SDS

Change in company details

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.