



#### Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: FLAKE SULPHUR

Synonyms: Commercially Formed Solid Elemental Sulphur, Flake Sulphur

Supplier: Devco Australia Holdings Pty Ltd

ABN: 45 098 077 662
Street Address: 398 Tingira Street

Pinkenba, Qld, 4008

Australia

Telephone No: +61 7 3260 2361 Fax No: +61 7 3260 2431 Emergency No: +61 7 3260 2361

(All Hours)

# **Section 2 - HAZARDS IDENTIFICATION**

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, prills, granules, pellets or flakes.

This material is hazardous according to Safe Work Australia – HAZARDOUS SUBSTANCE

Signal Word: WARNING



Hazard Statement: H315 Causes Skin Irritation

**Precautionary Statement(s):** 

**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-use





Storage: No Storage Statements

Disposal: No Storage Statements

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS No % Components 100 Sulphur 7704-34-9.

# **Section 4 - FIRST AID MEASURES**

Inhalation: Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most

comfortable position and keep them warm. Keep at rest until fully recovered. Seek medical advice if

symptoms persist.

Ingestion: Rinse mouth with water. If swallowed, do NOT induce vomiting. Immediately give a glass of water.

Seek medical advice.

If contact is made with eyes, immediately wash out with water. If pain or irritation persists, seek **Eye Contact:** 

medical advice.

**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 available). If swelling, redness, irritation or

blistering occurs seek medical advice.

For advice contact a Poisons Information Centre (telephone 131 126) or a doctor.

#### Section 5 - FIRE FIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray or fog.

# Specific Hazards arising from the substance:

Solid is combustible. May form flammable dust clouds in air. Dust clouds are readily ignited in air by weak frictional sparks, ensure all electrical appliances are isolated. Static charge can be created by moving Sulphur. Sulphur burns with a pale blue flame that may be difficult to see in daylight. Avoid contact with oxidising agents.

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## Specific protective equipment and precautions for fire fighters:

Sulphur can melt and flow in a fire situation. If safe to do so, remove containers from path of fire. Cool fire exposed containers with water spray from a protected location. On ignition will emit toxic fumes, including those of oxides of Sulphur. Wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keeping product and containers damp will reduce likelihood of re-ignition and dust generation.

#### Section 6 - ACCIDENTAL RELEASE MEASURES

# **Emergency Procedures/Environmental Precautions:**

Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of drains or waterways occurs advice local emergency services.

## Personal Precautions/Protective Equipment/Methods for cleaning up and containment:

Avoid accidents, clean up immediately as can be slippery when spilt. Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind and/or improve ventiliation. Cover with damp, absorbent materials such as sand or soil. Sweep up and avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. Use a spark free shovel.

#### Section 7 - HANDLING AND STORAGE

Precautions for safe handling:

Avoid skin and eye contact and breathing in dust. Avoid any handling that leads to dust generation. May form flammable dust clouds in air. Take precautions against static discharges.

# Conditions for safe storage, including and incompatibilities:

Store in a cool, dry, well ventilated environment, out of direct sunlight. Store away from other sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials such as oxidizing agents. Do not store on timber floors. Keep containers closed when not in use and check regularly for spills.

## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control Parameters:**

Safe Work Australia assign no value for this specific material. However, Workplace Exposure Standards apply for particulates.





Source	Material	TWA mg/m³
Australian Workplace Exposure Standards	sulphur granules, pellets, prills, flakes, pastilles (Inspirable dust (not otherwise classified))	10

(TWA calculated over an 8 hr working day, for a 5 day working week)

Appropriate Engineering Controls: Ensure that ventilation is adequate to maintain air concentrations below the

Workplace Exposure Standards. Keep containers closed when not in use. If in the handling of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered, ensuring that no sources of ignition are introduced.

## **Individual Protection Measures such as PPE:**

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

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









### **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Physical State: Solid Colour: Yellow

Odour: Odourless, however impurities may cause a hydrogen sulphide odour ("rotten

eggs")

Molecular Fomula: S

**Solubility:** Insoluble in water

**Specific Gravity:** 1.92 – 2.07

Flash Point: >180 °C (as dust)

Flammability Limits (%): 35 – 1,400 g/m<sup>3</sup> (as dust)

**Autoignition Temperature** 232 °C (as dust) **Melting Point:** 112.8 – 119.0 °C

Boiling Point: 444.6 °C pH: Not applicable





#### Section 10 - STABILITY AND REACTIVITY

**Reactivity:** Reacts violently with finely divided metals, alkali metals and mineral acids

Chemical Stability: Stable under normal conditions of storage and handling

Possibility of Hazardous Reactions: Corrosive to wet steel. Dust explosion hazard

**Conditions to Avoid:** Avoid naked flames and other sources of ignition, including static. Avoid exposure

to heat

**Incompatible Materials:** Incompatible with oxidising agents

Hazardous Decomposition Products: Oxides of Sulphur

#### Section 11 - TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet.

Symptoms or effects if the product is mishandled and over-exposure occurs include:

**Eye Contact:** May be an eye irritant. Exposure to dust may cause discomfort and physical

irritation to the eyes

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

**Skin Contact:** Contact with skin may result in irritation

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

**Acute Toxicity:** 

Data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

Oral (rat) LD50: >8437 mg/kg Oral (rabbit) LDLo: 175 mg/kg

Chronic Effects: No information available for sulphur





# **Section 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity:** Avoid contaminating drains and waterways

**Section 13 - DISPOSAL CONSIDERATIONS** 

**Disposal Methods:** Consult State Land Waste Management Authority for disposal. Dispose of

waste containers in accordance with local and/or regional and State regulations.

#### **Section 14 - TRANSPORTATION INFORMATION**

**Road and Rail Transport:** Not classified as a 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,

prills, granules, pellets or flakes.

Marine Transport: Not classified as a 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 into a specific shape such as

pastilles, prills, granules, pellets or flakes.

Air Transport: Not classified as a Dangerous Goods by the criteria of the International Air

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

#### Section 15 - REGULATORY INFORMATION

Classification: This product is hazardous according to Work Safe Australia.

HAZARDOUS SUBSTANCE

Hazard Statement: H315 Causes Skin Irritation

Poisons Schedule: None listed

This material is listed on the Australian Inventory of Chemical Substances (AICS)





# **Section 16 - OTHER INFORMATION**

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

Issue Date: September 2016

End of SDS