



SALES & SERVICES

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Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

1.1 Product identifiers

Product name : SULPHUR POWDER

1.2 Other means of identification

Sulphur, Dusting Sulphur

1.3 Recommended use of the product and restrictions on use

Fungicide, acaricide, rubber industries, fireworks

1.4 Details of supplier of the safety data sheet

Company : AGent Sales & Services Pty Ltd

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1.5 Emergency telephone number

Telephone : 1300 883 844

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

Flammable solids (Category 2)

Skin irritation (Category 1)

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word

: WARNING

Hazard statement(s)

H228 Flammable solid.

H315 Causes skin irritation.

Precautionary statement(s)

Prevention

P210 Keep away from heat / sparks / open flames / hot surfaces. No smoking.

P240 Ground / bond container and receiving equipment.

P241 Use explosion-proof electrical / ventilating / lighting equipment.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish.

Storage

No storage statements.

Disposal

No disposal statements.

2.3 Other hazards

None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Classification	Concentration (%)
Sulphur	7704-34-9	Flam. Sol. 2; Skin Irrit. 2; H315	> 90.0

For the full text of the H-Statements mentioned in this section, see Section 16

4. FIRST AID MEASURES**4.1 Description of First Aid measures****General advice**

Contact the Poisons Information Centre (Phone: Australia 131 126; New Zealand 0800 764 766) or consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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.

In case of skin contact

If skin or hair contact occurs, remove contaminated clothing and wash skin and hair with soap and water. Seek immediate medical assistance.

In case of eye contact

In case of eye contact, check for and remove any contact lenses. Immediately rinse thoroughly with plenty of running water for at least 15 minutes, keeping eyelids open. Consult a doctor/physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in Section 2.2 and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

4.4 First Aid facilities

Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES**5.1 Suitable extinguishing media**

Coarse water spray, fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Unsuitable Extinguishing Media:

Solid water jet/stream may scatter and spread the fire.

5.2 Special hazards arising from the chemical

Flammable solid. Can melt and flow in a fire situation. On burning will emit toxic fumes, including those of oxides of sulphur.

5.3 Special protective equipment and precautions for fire fighters

Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire-fighting clothing (includes fire-fighting helmet, coat, trousers, boots and gloves). If safe to do so, remove containers from path of fire. Keep containers cool with water spray.

5.4 Hazchem code

1Z

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Slippery when spilt. Eliminate all sources of ignition. Work up wind or increase ventilation. Wear respiratory protection. Avoid dust formation. Avoid breathing in dust. Evacuate personnel to safe areas. Isolate danger area. Use clean, non-sparking tools and equipment. All equipment used when handling the product must be grounded. For personal protection see Section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Isolate the danger area. Do not let product enter drains or waterways. Discharge into the environment must be avoided. If contamination of sewers or waterways has occurred, advise local emergency services. Observe all local and national regulations.

6.3 Methods and materials for containment and cleaning up

Contain and sweep/shovel or vacuum up spills with dust binding material. Use spark free shovel. Avoid generating dust. Transfer to a suitable, labelled container and dispose of promptly as hazardous waste.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition – No smoking. Keep away from heat and sources of ignition. Take precautionary measures against static discharges by bonding and grounding equipment.

For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry, well-ventilated place. Store away from sources of heat or ignition. Check regularly for spills. Store away from incompatible materials described in Section 10.

This material is classified as a Dangerous Goods Class 4 Flammable Solid by the criteria of the ADG Code and must be stored and handled in accordance with the relevant regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

None allocated for this product. However, exposure standard for dust not otherwise specified is:

Chemical Name	Reference	TWA – Peak Limitation		STEL		Carcinogen Category	Notices
		ppm	mg/m ³	ppm	mg/m ³		
Inspirable dust	ASCC	-	10	-	-	-	-
Respirable dust	ASCC		3				

As published in "Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA.

Biological Limits

None allocated for this product.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Adequate ventilation should be provided so that exposure limits are not exceeded. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment must be carried out to determine the minimum PPE requirements.

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.

Eye/face protection

Safety glasses with side shields or goggles. See Australian Standards (AS/NZS 1336 & 1337).

Skin protection

Wear protective gloves and protective clothing appropriate for the risk of exposure. See Australian Standards (AS 2161 & 2919 and AS/NZS 2210). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Respiratory protection

Wear a dust mask where dusts/vapours are generated and engineering controls are inadequate. See Australian Standards (AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form : Solid powder Colour : Yellow
Odour:	Sulphur
Odour Threshold:	No data available
pH:	6 - 8
Melting Point:	115°C
Boiling Point:	444°C
Decomposition Temperature:	Approx. 180°C
Evaporation Rate:	Not applicable
Flash Point:	> 207.2°C
Auto Ignition Temperature:	> 250°C
Density:	2.07g/cm ³
Vapour Density (air=1):	> 1.0 (relative)
Vapour Pressure:	0.105 mm Hg @ 140.2°C
% Volatiles:	No data available
Solubility in water:	Insoluble

10. STABILITY AND REACTIVITY**10.1 Reactivity**

Corrosive to steel. Reacts violently with oxidising agents.

10.2 Chemical stability

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions

Dust explosion hazard.

10.4 Conditions to avoid

Avoid dust generation. Avoid exposure to heat, sources of ignition, and open flame.

10.5 Incompatible materials

Incompatible with oxidising agents, reducing agents, bases, halides, flammable materials, metal oxides, metal salts and strong acids.

10.6 Hazardous decomposition products

Sulphur dioxide.

11. TOXICOLOGICAL INFORMATION**11.1 Information on toxicological effects****Acute toxicity**

LD50 Oral (rat) : > 2,000 mg/kg

LD50 Dermal (rabbit) : > 2,000 mg/kg

LC50 Inhalation (rat) : > 9.23 mg/L / 4h

Skin corrosion/irritation

Contact with skin will result in irritation

Serious eye damage/eye irritation

May be a mild eye irritant

Respiratory or skin sensitisation

Not a skin sensitiser

Germ cell mutagenicity

Non mutagenic

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen.

Reproductive toxicity

No data available

Specific target organ toxicity (STOT) - single exposure

No data available

Specific target organ toxicity (STOT) - repeated exposure

No data available

Aspiration hazard

No data available

Health Effects

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:

Eye contact : May be an eye irritant.

Skin contact : Contact with skin will result in irritation.

Ingestion : Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.

Inhalation : Breathing in dust may result in respiratory irritation

11.2 Information on possible routes of exposure

The substance can be absorbed into the body by ingestion and by inhalation.

11.3 Additional Information

RTECS: WS4250000

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Avoid contaminating waterways.

Toxicity to fish:

LC₅₀ (Oncorhynchus mykiss, rainbow trout) : > 180 mg/L, 96h

LC₅₀ (other fish) = 866 mg/L, 96h

Toxicity to daphnia & other aquatic invertebrates

EC₅₀ (Daphnia magna, water flea) : > 5,000 mg/L, 48h

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods and containers

Ensure waste disposal conforms to relevant local, state and federal authority waste disposal regulations. All empty packaging should be disposed of as unused product.

13.3 Special precautions for landfill or incineration

Contact a specialist disposal company or the local waste regulator for advice. Advise flammable nature.

14. TRANSPORT INFORMATION

Classified as a Dangerous Goods by the criteria of the ADG Code for transport by road or rail.

14.1 UN number	1350
14.2 Proper shipping name	SULPHUR
14.3 Transport hazard class	4.1 Flammable Solids
14.4 Packing group	III
14.5 Environmental hazards	No
14.6 Special precautions for users	No data available
14.7 Hazchem code	1Z
14.8 Dangerous goods initial emergency response guide (SAA/SNZ HB76:2010)	20

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

None allocated

Carcinogen classification under WHS Regulations 2011, Schedule 10

Not listed

Notification status

AICS On the inventory or in compliance with the inventory

16. OTHER INFORMATION

Key / legend to abbreviations and acronyms used in the MSDS

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
NOHSC	National Occupational Health and Safety Commission
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
Flam. Sol.	Flammable solids
Skin Irrit.	Skin Irritation
TWA	Time weighted average
STEL	Short term exposure level
SWA	Safe Work Australia
Peak Limitations	A ceiling concentration that should not be exceeded over a measurement period, which should be as short as possible, but not exceeding 15 minutes
LD ₅₀	Lethal dose 50. The single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation
LC ₅₀	Lethal concentration that kills 50% of an animal population within a specified time
TD Lo	The lowest dose of a substance known to have produced signs of toxicity
RTECS	Registry of Toxic Effects of Chemical Substances
g/L	Grams per litre
g/cm ³	Grams per cubic centimetre
mg/m ³	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
WHS	Work Health and Safety

Literature references

"Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA

Disclaimer

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