



Safety Data Sheet

Date of Issue: 01.09.2020

Date of Expiry: 01.09.2025

1: IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name: : **ECP Limited**
Address: : PO Box 34125, Birkenhead, Auckland 0746
Telephone: : +64 9 480 4386
Facsimile: : +64 9 480 4385
Emergency phone number: : 0800 243 622 (24 hours)

Product	Sulfur			Code	5140
CAS#	HSNO#	UN #	DG Class/es	Packing group #	
7704-34-9	HSR001284	1350	4.1	III	

Recommended use : Laboratory Investigations

2: Hazards identification

2.1 GHS Classification

Flammable Solids (Category B), H228
Acute toxicity, Oral (Category E), H303
Acute toxicity, Inhalation (Category E), H333
Acute toxicity, Dermal (Category E), H313
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Hazard Pictogram



Signal word : **Warning**

Hazard statement(s)

H228 : Flammable solid.
H303 : May be harmful if swallowed.
H313 : May be harmful in contact with skin.
H333 : May be harmful if inhaled.

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

Response

P304 + P312 : IF INHALED: Call a POISON CENTER or doctor/ physician if you feel unwell.
P312 : Call a POISON CENTER or doctor/ physician if you feel unwell.
P370 + P378 : In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

3: Composition/information on ingredients

Substance / Mixture : Substance

3.1 Substances

Synonyms : sulfur
Formula : S
Molecular weight : 32.07 g/mol
CAS-No. : 7704-34-9
EC-No. : 231-722-6
Index-No. : 016-094-00-1

Hazardous ingredients

Component	Classification	Concentration
Sulfur	4.1.1 B; 6.1 E; H228, H303, H333, H313	<= 100 %

4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

In case of eye contact

After eye contact: rinse out with plenty of water. Remove contact lenses.

If swallowed

After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5: Firefighting measures

5.1 Extinguishing media

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture

Sulfur oxides

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

Combustible.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information

Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system

6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains. Risk of explosion.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

7: Handling and storage

7.1 Precautions for safe handling

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Tightly closed. Keep away from heat and sources of ignition.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

We are not aware of any national exposure limit.

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.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection

Handle with gloves. 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 in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type or respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards.

9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- a) Appearance
 - Form : powder
- b) Odour : No data available
- c) Odour Threshold : No data available
- d) pH : No data available
- e) Melting point/freezing point
 - Melting point/range : 118 - 120 °C
- f) Initial boiling point and boiling range : 444.7 °C
- g) Flash point 160 °C - c.c.
- h) Evaporation rate : No data available
- i) Flammability (solid, gas) : May form combustible dust concentrations in air.
- j) Upper/lower flammability or explosive limits : No data available
- k) Vapor pressure : No data available
- l) Vapor density : No data available
- m) Relative density : No data available
- n) Water solubility : No data available
- o) Partition coefficient:
 - n-octanol/water : No data available
- p) Autoignition temperature : No data available
- q) Decomposition temperature : No data available
- r) Viscosity : No data available
- s) Explosive properties : No data available
- t) Oxidizing properties : No data available

9.2 Other safety information

No data available

10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Avoid moisture. Heat, flames and sparks.
Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Sulfur oxides

Other decomposition products - No data available

In the event of fire: see section 5

11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male and female - 4,250 mg/kg

(OECD Test Guideline 401)

LC50 Inhalation - Rat - 4 h - > 9.23 mg/l

LD50 Dermal - Rat - male and female - > 2,000 mg/kg

(OECD Test Guideline 434)

Skin corrosion/irritation

Serious eye damage/eye irritation

slight irritation

Respiratory or skin sensitization

Patch test: - Human

Result: negative

Germ cell mutagenicity

Ames test

Salmonella typhimurium

Result: negative

Carcinogenicity

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

Reproductive toxicity

Specific target organ toxicity - single exposure

Acute inhalation toxicity - Irritation symptoms in the respiratory tract.

Specific target organ toxicity - repeated exposure

Aspiration hazard

Additional Information

RTECS: WS4250000

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting., Dermatitis

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Oncorhynchus mykiss (rainbow trout) - 53 mg/l - 96 h

Remarks: (in analogy to similar products)(ECHA)

Toxicity to daphnia and other aquatic invertebrates

static test EC50 - Ceriodaphnia (water flea) - 121.7 mg/l - 48 h

(US-EPA)

Remarks: (in analogy to similar products)

Toxicity to algae

static test ErC50 - Chlorella vulgaris (Fresh water algae) - 2,700 mg/l
- 18 Days

Remarks: (in analogy to similar products)(ECHA)

Toxicity to bacteria

static test EC50 - activated sludge - 1,618 mg/l - 30 min
(OECD Test Guideline 209)

12.2 Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

12.4 Mobility in soil

12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not Conducted.

13: Disposal considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations.

Labels should not be removed from containers until they have been cleaned. Do not cut, puncture or weld on or near containers. Empty containers may contain flammable residues. Contaminated containers must not be treated as household waste. Containers should be cleaned by appropriate methods and then re-used or disposed of by landfill or incineration as appropriate. Do not incinerate closed containers. Advise flammable nature.

Product Disposal:

Product wastes are controlled wastes and should be disposed of in accordance with all applicable local and national regulations. This product can be disposed through a licensed commercial waste collection service. The product should be rendered non-hazardous before being sent to a licensed landfill facility. Alternatively, as the product is combustible, it can be sent to an approved high temperature incineration plant for disposal.

Personal protective clothing and equipment as specified in Section 8 of this SDS must be worn during handling and disposal of this product. The ventilation requirements as specified in the same section must also be followed, and the precautions given in Section 7 of this SDS regarding handling must also be followed.

Do not dispose into the sewerage system. Do not discharge into drains or watercourses or dispose where ground or surface waters may be affected.

In New Zealand, the disposal agency or contractor must comply with the New Zealand Hazardous Substances (Disposal) Regulations 2001. Further details regarding disposal can be obtained on the EPA New Zealand website under specific group standards.

Container Disposal:

The container or packaging must be cleaned and rendered incapable of holding any substance. It can then be disposed of in a manner consistent with that of the substance it contained. In this instance the packaging can be disposed through a commercial waste collection service.

Alternatively, the container or packaging can be recycled if the hazardous residues have been thoroughly cleaned or rendered non-hazardous.

In New Zealand, the packaging (that may or may not hold any residual substance) that is lawfully disposed of by householders or other consumers through a public or commercial waste collection service is a means of compliance with regulations.

14: Transport Information Table

	ADR/RID – European	IMDG International	IATA – DGR International Air
--	-------------------------------	-------------------------------	---

		packaging certification	Maritime Dangerous Goods Code	Travel Association – Dangerous Goods Regulations
14.1	UN Number	1350	1350	1350
14.2	UN Proper Shipping name	SULPHUR	SULPHUR	Sulphur
14.3	Transport Hazard Class	4.1	4.1	4.1
14.4	Packaging group	III	III	III
14.5	Environmental Hazards	No	No	No
14.6	Special precautions for user	None		

15: Regulatory information

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

National regulatory information

HSNO Approval Code: HSR001284

HSNO Group Standard Approval: HSR002692 - Laboratory Chemicals and Reagent Kits (Class 4) Group Standard 2006

Tracking Required: not required

Approved Handler Cert.: not required

16: Disclaimer

The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

****END*****END*****END*****END*****END****