

# SAFETY DATA SHEET

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** **SELENIUM 5**  
**UN NUMBER:**  
**PRODUCT USE:** For the treatment and prevention of selenium responsive diseases in sheep and cattle.  
**SUPPLIER:** CP Solutions LP  
 44 Aerodrome Road  
 Mount Maunganui 3116  
**Telephone:** +64 7 575 8853

**24 HOUR EMERGENCY CONTACT: 0800 764 766 (National Poisons Centre)**

**DATE OF PREPERATION:** 17<sup>th</sup> June 2025 Revision 3

## Section 2: HAZARDS IDENTIFICATION

### STATEMENT OF HAZARDOUS NATURE

This product is **HAZARDOUS IN THIS FORM AND AT THIS STRENGTH**.  
 Handle correctly and as directed by this SDS.

### HAZARD LABELLING WARNING



### HAZARD CLASSIFICATION AND STATEMENTS

HSNO	GHS	Signal Word	GHS Hazard Statement
Slightly harmful to aquatic environment	Category 3		H413 May cause long-lasting harmful effects to aquatic life

### Prevention Statements

P273: Avoid release to the environment

## Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

### COMPOSITION

NAME	CAS NUMBER	% w/w
Water (micro-filtered)	7732-18-5	>60
Sodium Selenate	13410-01-0	<10
Yellow Dye	1934-21-0	<1

## Section 4: FIRST AID MEASURES

**Swallowed:** Give 3 to 4 glasses water. DO NOT INDUCE VOMITTING. Seek medical attention if necessary

**Skin:** Rinse skin with plenty of water.

**Eye:** Rinse eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation persists.

**Inhaled:** Not normally a problem.

**Workplace Facilities:** Eye bath and running water.

**Notes for Medical Personnel:** Treat symptomatically.

## Section 5: FIRE FIGHTING MEASURES

**Type of Hazard:** Not flammable.

**Fire Hazard Properties:** Contain runoff from fire control or dilution water - runoff may pollute waterways.

**Extinguishing Media & Methods:** Use appropriate extinguishing media most suitable for surrounding fire conditions.

**Recommended Protective Clothing:** Wear protective clothing and breathing apparatus.

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## Section 6: ACCIDENTAL RELEASE MEASURES

**Emergency Procedures:** Personnel involved in the clean up should wear full protective clothing. Increase ventilation. Contain spill if safe to do so. DO NOT let product reach drains or waterways. If product does enter a waterway, advise local and regional authorities.

**Methods and Materials for Containment and Clean up.** Contain and sweep/shovel up spills with binding material. Transfer to a suitable, labeled container and hold for safe disposal.

## Section 7: HANDLING AND STORAGE

**Handling:** Ensure an eye bath and wash room facilities are available and ready for use

**Storage:** Keep out of reach of children. Store in the original, labelled container with the lid tightly closed, in a cool dry, well ventilated area, out of direct sunlight.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**Workplace Exposure Standards:** The lowest harmful dose by oral administration is 88ml/Kg

**Ventilation requirements:** No specific requirements.

**Personal Protective Equipment (PPE):** RESPIRATORY: None. EYE/FACE: Chemical goggles. HAND: Impervious gloves. SKIN/BODY: Overalls, safety shoes.



**General hygiene:** Wash hands thoroughly after handling. Do not eat, drink or smoke while handling the product.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE

Yellow Liquid

### PHYSICAL PROPERTIES

PROPERTY	VALUE
State	Liquid
Odour	Odourless
Melting Range (°C)	
Boiling Range (°C)	
Solubility in water (g/L, 20°C)	
pH (as supplied)	
Specific Gravity (water = 1)	
Relative Density (23°C)	
Autoignition Temp (°C)	
Flash Point (°C)	

## Section 10: CHEMICAL STABILITY AND REACTIVITY

**Stability of the Substance:** Product is stable under normal conditions of storage.

**Conditions to avoid:** N/A

**Material to avoid:** N/A

**Hazardous decomposition Products:** None.

**Hazardous polymerization:** Does not occur.

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## Section 11: TOXICOLOGICAL INFORMATION

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

**Acute Effects:** Acute selenium poisoning (Selenium 99%) produces central nervous system effects, which include nervousness, convulsions, and drowsiness. Other signs of intoxication can include skin eruptions, lassitude, gastrointestinal distress, teeth that are discoloured or decayed, odorous ("garlic") breath and partial loss of hair and nails.

**Swallowed:** May be harmful if swallowed.

**Skin:** Irritant. Toxic by dermal absorption.

**Eye:** Irritant. May cause conjunctivitis.

**Inhaled:** Irritating to mucous membranes and upper respiratory tract.

**Acute Toxicity:** Oral (LD<sup>50</sup>); 1.6mg/kg (Rat) (Selenium 99%)

**Chronic Effects:** Evidence from animal tests and studies on exposed humans indicate that repeated or prolonged exposure to this chemical could result in liver damage

**Chronic Toxicity:** Target organ/s; Spleen, Liver, Kidneys.

**Carcinogenic Effects:** Not classifiable.

**Mutagenic Effects:** Possible mutagen.

**Developmental Effects:** In laboratory animals, this compound (Selenium 99%) has caused both birth defects and damage to the reproductive system.

## Section 12: ECOLOGICAL INFORMATION

**Potential Environmental Considerations:** Harmful to aquatic life with long lasting effects. Harmful to the soil environment.

**Ecotoxicity in water (Selenium 99%):**

Toxicity to daphnia and other aquatic invertebrates :

EC50 - Daphnia magna (Water flea) - 0.39 mg/l - 48 h

Toxicity to algae :

Growth inhibition LOEC - Chlorella vulgaris (Fresh water algae) - 0.083 mg/l - 7 d

Growth inhibition EC50 - Ankistrodesmus falcatus - 0.033 mg/l - 14 d

**Products of Degradation:** Not specified

## Section 13: DISPOSAL CONSIDERATIONS

**Disposal Information:** Triple rinse containers and recycle where appropriate. Dispose of in a landfill area in accordance with local government regulations.

## Section 14: TRANSPORT INFORMATION

**Hazard Class:** 91D

**UN Number:**

**Packing Group:**

**Hazchem Code:**

**Land Transport:** Check regulations

**Sea Transport:** Check regulations

**Air Transport:** Check regulations

**Other Information:**

## Section 15: REGULATORY INFORMATION

**HSNO Approval Number:** N/A

**HSNO Classifications:**

9.1D (Aquatic ecotoxic)

**Regulatory status:** No special regulatory status.

## Section 16: OTHER INFORMATION

While CP Solutions LP in good faith has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, CP Solutions LP 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.

### Interpretation and Abbreviations

Controls applying to a substance:

- \* denotes that changes have been made to these controls, further information on these changes is located in the transfer notice for that substance,
- ( R ) abbreviation for the term Regulation of the Hazardous Substances regulations

IARC – International Agency for Research on Cancer.

LOEL – Lowest Observed Effect Level.

LD<sub>Lo</sub> – Lethal Dose Low (the lowest dosage per unit of bodyweight of a substance known to have resulted in fatality in a particular animal species).

MAK – Maximum workplace concentration in the workplace air that generally does not have known adverse effects on the health of the employee nor cause unreasonable annoyance when a person is repeatedly exposed during long periods, usually 8 hours daily, 40hour working week).

NZIoC – New Zealand Inventory of Chemicals.

PEL – Permissible exposure limit.

PPE – Personal Protective Equipment.

STEL – Short term exposure limit.

TOC – Total Organic Carbon.

TSCA – US Toxic Substances Control Act Existing Chemicals.

TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.

### Sources of key data used to compile the datasheet:

Manufacturers SDS

NZ EPA CCID

Health and Safety at Work (Hazardous Substances) Regulations 2017

Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

Hazardous Substances (Safety Data Sheets Notice 2017

Hazardous Substances (Classification) Notice 2017

Labelling of Hazardous Substances Technical Guide 2012

### DISCLAIMER

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**END OF SDS**