

SAFETY DATA SHEET (SDS)


Cobalt (II) nitrate, 0.1M

Issue date: 28-07-2020

Section 1: Product Identifier and Chemical Identity

Product Identifier	
Product Name:	Cobalt (II) nitrate, 0.1M
Product Codes:	MC91.05, MC92.05
Other means of identification:	
Chemical formula, alternative names:	Co(NO ₃) ₂ (aq)
Recommended use of the chemical and restrictions on use	
Recommended Use:	For laboratory use only.
Suppliers name, address and phone number	
Suppliers Name:	Southern Biological
Suppliers ABN:	94 630 703 810
Suppliers Address:	1/44 Rushdale Street Knoxfield Victoria 3180 Australia
Suppliers Phone No.:	1300 138 561
Suppliers Fax No.:	+613 9753 3896
Emergency Phone number (BH)	1300 138 561

Section 2: Hazard Identification

Classification of the Hazardous Chemical	
Hazard Category	Respiratory Sensitisation Category 1, Skin Sensitisation Category 1, Carcinogenicity Category 1B, Reproductive Toxicity Category 1B, Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Germ Cell Mutagenicity Category 2, Acute Toxicity - Oral Category 4
Label elements	
Hazard Pictograms:	
Signal Word:	Danger
Hazard Statements:	Allergy alert! May cause cancer Suspected of causing genetic defects May damage fertility May cause allergy or asthma symptoms or breathing difficulties if inhaled

	<p>May cause an allergic skin reaction Toxic to aquatic life with long lasting effects</p> <p>Potential hazards: TOXIC; IRRITANT; SUSPECTED OF CAUSING CANCER AND GENETIC DEFECTS; MAY DAMAGE FERTILITY. May cause skin or lung sensitisation.</p>
Precautionary Statements:	<p>Should not be handled by pregnant women. Women of reproductive age should avoid handling the chemical.</p> <p>Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.</p> <p>Obtain special instructions before use.</p> <p>Do not handle until all safety precautions have been read and understood.</p> <p>Use personal protective equipment as required</p>
Other Hazards	
Results of PBT and vPvB assessment:	<p>PBT: Not applicable</p> <p>vPvB: Not applicable</p>

Section 3: Composition/information on ingredients

Ingredients			
Name	CAS	Proportion	Hazard Class
Cobalt (II) nitrate, hexahydrate	10026-22-9	2.9%	Respiratory Sensitisation Category 1, Skin Sensitisation Category 1, Carcinogenicity Category 1B, Reproductive Toxicity Category 1B, Hazardous to the aquatic environment - Acute Category 1, Hazardous to the aquatic environment - Chronic Category 1, Oxidizing Solid Category 2, Germ Cell Mutagenicity Category 2, Acute Toxicity - Oral Category 4
Water	7732-18-5	97.1%	None

Section 4: First Aid Measures

General Information	
After Inhalation:	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms; Call a doctor.
After skin contact:	Wash with water and soap and rinse thoroughly. If skin irritation occurs: Get Medical advice/ attention.
After eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
After swallowing:	Wash out mouth with water. Obtain emergency medical attention. Call a POISON CENTRE or doctor/physician if you feel unwell.
Information for doctor:	
Most important symptoms and effects both acute and delayed:	Treat symptomatically.
Indications of any immediate medical attention and special treatment needed	No further relevant information available.

Section 5: Firefighting measures

Extinguishing media	
Suitable extinguishing agents:	Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
Special hazards arising for the substance or mixture:	Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents. Product is a strong oxidiser.
Advice for firefighters	
Protective equipment:	Do not enter the fire area without proper protective equipment including respiratory equipment.

Section 6: Accidental release measures

General Information	
Personal precautions, protective equipment and emergency procedures:	Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Isolate area. Keep unnecessary personnel away. Avoid the generation of dusts during clean-up. Avoid breathing dust/fume/gas/mist/vapours/spray.
Environmental precautions:	Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Vacuum or sweep up material and place in a disposal container Do not allow the spilled product to enter public drainage system or open waterways. Collect spillage.
Methods and material for containment and cleaning up:	Dispose of contaminating material as waste according to item 13. Ensure adequate ventilation.
Reference to other sections:	See Section 7 for information on safe handling. See Section 8 for information on protective equipment. See Section 13 for disposal information.

Section 7: Handling and Storage

General Information	
Precautions for safe handling:	Ensure good ventilation/exhaustion at the workplace. Do not eat drink or smoke when using this product. Wash contaminated clothing before reuse.
Information about fire – and explosion protection:	Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Store away from combustible materials. Take precautions to avoid mixing with combustibles.

Conditions for safe storage, including any incompatibilities.	
Storage:	Store in cool dry area out of direct sunlight and incompatible materials. Keep containers closed when not in use. Store in suitably labelled containers.
Requirements to be met by storerooms and receptacles:	No special requirements.
Information about storage in one common storage facility:	Not required.
Further information about storage conditions:	Keep container tightly sealed. Keep out of direct sunlight.
Specific end use(s):	No further relevant information available.

Section 8: Exposure controls/personal protection.

General information			
Additional information about design of technical facilities:		No further data: see section 7	
Control parameters:			
Ingredients with limit values that require monitoring at the workplace:			
Name	STEL	TWA	
	mg/m3 ppm	mg/m3	Footnote
Cobalt (II) Nitrate, hexahydrate	N/A	0.02	TWA as Co
Additional information		The lists valid during the making were used as basis.	
Exposure Controls:			
General protective and hygienic measures:		<p>Use only in systems, processes and procedures in which effective ventilation has been provided.</p> <p>Keep away from foodstuffs, beverages and feed.</p> <p>Immediately remove all soiled and contaminated clothing</p> <p>Wash hands before breaks and at the end of work.</p> <p>Avoid contact with eyes.</p>	
Respiratory protection:		In case of significant exposure use respiratory filter device. Not normally required.	
Clothing / Foot-wear and equipment		No special requirements.	
Protection of hands:		PVC or rubber gloves	
Eye protection:		Tightly sealed goggles	
Skin protection:		Laboratory Coat	

Section 9: Physical and chemical properties

Appearance:	
Form:	Liquid
Colour:	Red
Odour:	Not determined

Odour Threshold:	Not determined
pH value:	Not determined
Change in Condition:	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
Flash point:	Not determined
Flammability (solid / gaseous)	Not determined
Ignition Temperature	
Decomposition temperature:	Not determined
Self-igniting:	Not determined
Danger of explosion:	Not determined
Explosion limits	
Lower:	Not determined
Upper:	Not determined
Vapour pressure:	Not determined
Density:	Not determined
General Info	
Relative density:	Not determined
Vapour density:	Not determined
Evaporation rate:	Not determined
Solubility in/ Miscibility with water:	Soluble
Partition coefficient (n-octanol/water):	Not determined
Viscosity:	Not determined
Other information:	Not determined

Section 10: Stability and reactivity

Reactivity	
General	No further relevant information available.
Chemical Stability	

Thermal decomposition / conditions to be avoided:	No decomposition if used according to specifications.
Possibility of hazardous reactions:	No dangerous reactions known.
Conditions to avoid:	Sparks, open flame, other ignition sources, and elevated temperatures.
Incompatible materials:	Strong reducing agents, organics
Hazardous decomposition products:	Nitrogen oxides, CO _x

Section 11: Toxicological information

Information on toxicological effects	
General	Acute toxicity
Primary irritant effect:	
Inhalation:	Not classified
Possibility of hazardous reactions:	Not classified
Conditions to avoid:	Not classified
Chronic Toxicity:	
General	Evidence of a mutagenic effect. Evidence of a teratogenic effect (birth defect). No evidence of a sensitization effect. Evidence of negative reproductive effects.

Section 12. Ecological information

Toxicity	
Aquatic toxicity:	Severe ecological hazard. This product may be toxic to plants and/or wildlife. Highly/very toxic to fish and other water organisms.
Persistence and degradability:	No further relevant information available.
Behaviour in environmental systems	
Bio-accumulative potential:	No further relevant information available.
Mobility in soil:	No further relevant information available.
Additional ecological information	
Results of PBT and vPvB assessment	PBT: Not applicable vPvB: Not applicable
Other adverse effects:	No further relevant information available.

Section 13. Ecological information

Waste treatment methods	
-------------------------	--

Recommendation	Prevent this material from entering waterways, drains and sewers. Comply with official regulations.
Uncleaned packaging:	
Recommendation:	Disposal must be made according to official regulations.
Recommended cleansing agents:	Water, if necessary, together with cleansing agents.

Section 14. Transport information

General	Not regulated for shipping at this concentration
---------	--

Section 15. Regulatory Information

Safety health and environmental regulations/legislation specific for the substance or mixture	
Australian Inventory of Chemical Substances:	Substances are listed.
Standard for the Uniform Scheduling of Medicines and Poisons	S6
GHS label elements	None
Chemical safety assessment:	A Chemical Safety Assessment has not been carried out.

Section 16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.