

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** SODIUM COBALTINITRITE

**Other means of identification**

**Product No.:** 3656

**Recommended use and restriction on use**

**Recommended use:** Not available.

**Restrictions on use:** Not known.

**Manufacturer/Importer/Supplier/Distributor Information**

**Manufacturer**

**Company Name:** Avantor Performance Materials, Inc.  
**Address:** 3477 Corporate Parkway, Suite 200  
Center Valley, PA 18034

**Telephone:** Customer Service: 855-282-6867

**Fax:**  
**Contact Person:** Environmental Health & Safety  
**e-mail:** info@avantormaterials.com

**Emergency telephone number:**

24 Hour Emergency: 908-859-2151

Chemtrec: 800-424-9300

## 2. Hazard(s) identification

**Hazard Classification**

**Physical Hazards**

Oxidizing solids Category 2

**Health Hazards**

Respiratory sensitizer Category 1

Skin sensitizer Category 1

Carcinogenicity Category 2

**Label Elements**

**Hazard Symbol:**



**Signal Word:** Danger

**Hazard Statement:** May intensify fire; oxidizer.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.  
Suspected of causing cancer.

**Precautionary**

**Statement**

- Prevention:** Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat. - No smoking. Take any precaution to avoid mixing with combustibles. Keep/Store away from combustible materials. Wear protective gloves/protective clothing/eye protection/face protection. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace.
- Response:** IF exposed or concerned: Get medical advice/attention. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up.
- Disposal:** Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification:** None.

**3. Composition/information on ingredients**

**Substances**

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
SODIUM COBALTINITRIDE		13600-98-1	90 - 100%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

**4. First-aid measures**

- General information:** Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
- Ingestion:** Rinse mouth thoroughly. Drink a few glasses of water or milk. Call a POISON CENTER or doctor/physician if you feel unwell.
- Inhalation:** Move to fresh air. Get medical attention if symptoms persist.
- Skin Contact:** Wash skin thoroughly with soap and water. Get medical attention if irritation persists after washing. Wash contaminated clothing before reuse.
- Eye contact:** Flush thoroughly with water. If irritation occurs, get medical assistance.

**Most important symptoms/effects, acute and delayed**

- Symptoms:** May cause irritation to skin, eyes, and respiratory tract. May cause allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**Indication of immediate medical attention and special treatment needed**

**Treatment:** Treat symptomatically. Symptoms may be delayed.

## 5. Fire-fighting measures

**General Fire Hazards:** In case of fire and/or explosion do not breathe fumes.

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** Water spray, dry powder or carbon dioxide.

**Unsuitable extinguishing media:** None known.

**Specific hazards arising from the chemical:** During fire, gases hazardous to health may be formed.

### Special protective equipment and precautions for firefighters

**Special fire fighting procedures:** Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Cool containers exposed to flames with water until well after the fire is out.

**Special protective equipment for fire-fighters:** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures:** Keep unauthorized personnel away. Use personal protective equipment. Ventilate closed spaces before entering them. See Section 8 of the MSDS for Personal Protective Equipment.

**Methods and material for containment and cleaning up:** Avoid dust formation. Sweep up and place in a clearly labeled container for chemical waste. Clean surface thoroughly to remove residual contamination.

**Notification Procedures:** Prevent entry into waterways, sewer, basements or confined areas. Stop leak if you can do so without risk. Inform authorities if large amounts are involved.

**Environmental Precautions:** Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

**Precautions for safe handling:** Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Avoid inhalation of dust. Wash thoroughly after handling.

**Conditions for safe storage, including any incompatibilities:** Keep container tightly closed. Store in a cool and well-ventilated place. Store in a dry place. Store away from incompatible materials.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
SODIUM COBALTINITRITE - as Co	TWA	0.02 mg/m <sup>3</sup>	US. ACGIH Threshold Limit Values (2011)

#### Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
SODIUM COBALTINITRITE (Cobalt: Sampling time: End of shift at end of work week.)	1 µg/l (Blood)	ACGIH BEL (03 2013)
	15 µg/l (Urine)	ACGIH BEL (03 2013)

#### Appropriate Engineering Controls

No data available.

#### Individual protection measures, such as personal protective equipment

**General information:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area.

**Eye/face protection:** Use tight fitting goggles if dust is generated.

#### Skin Protection

**Hand Protection:** Wear protective gloves.

**Other:** Wear suitable protective clothing.

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower.

## 9. Physical and chemical properties

### Appearance

**Physical state:** Solid  
**Form:** Powder.  
**Color:** Yellow-orange  
**Odor:** Odorless  
**Odor threshold:** No data available.  
**pH:** No data available.  
**Melting point/freezing point:** No data available.  
**Initial boiling point and boiling range:** No data available.  
**Flash Point:** No data available.  
**Evaporation rate:** No data available.  
**Flammability (solid, gas):** No data available.

#### Upper/lower limit on flammability or explosive limits

<b>Flammability limit - upper (%):</b>	No data available.
<b>Flammability limit - lower (%):</b>	No data available.
<b>Explosive limit - upper (%):</b>	No data available.
<b>Explosive limit - lower (%):</b>	No data available.
<b>Vapor pressure:</b>	No data available.
<b>Vapor density:</b>	No data available.
<b>Relative density:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in water:</b>	Very Soluble
<b>Solubility (other):</b>	No data available.
<b>Partition coefficient (n-octanol/water):</b>	No data available.
<b>Auto-ignition temperature:</b>	No data available.
<b>Decomposition temperature:</b>	No data available.
<b>Viscosity:</b>	No data available.

**Other information**

**Molecular weight:** 403.94 g/mol (CoN6O12.3Na)

## 10. Stability and reactivity

<b>Reactivity:</b>	Contact with combustible material may cause fire.
<b>Chemical Stability:</b>	Material is stable under normal conditions.
<b>Possibility of Hazardous Reactions:</b>	Hazardous polymerization does not occur.
<b>Conditions to Avoid:</b>	Contact with incompatible materials.
<b>Incompatible Materials:</b>	Strong reducing agents. Organic compounds. Flammable/combustible material.
<b>Hazardous Decomposition Products:</b>	Toxic metal fumes may form when heated to decomposition. Thermal decomposition may produce oxides of nitrogen.

## 11. Toxicological information

**Information on likely routes of exposure**

<b>Ingestion:</b>	May cause irritation of the gastrointestinal tract.
<b>Inhalation:</b>	May cause irritation to the respiratory system. May cause respiratory allergy.
<b>Skin Contact:</b>	May cause irritation. Prolonged or repeated contact may cause skin sensitization in susceptible individuals.
<b>Eye contact:</b>	May irritate eyes.

**Information on toxicological effects**

**Acute toxicity (list all possible routes of exposure)**

<b>Oral Product:</b>	No data available.
<b>Dermal Product:</b>	No data available.

**Inhalation**

**Product:** No data available.

**Repeated Dose Toxicity**

**Product:** No data available.

**Skin Corrosion/Irritation**

**Product:** May cause skin irritation.

**Serious Eye Damage/Eye Irritation**

**Product:** May irritate eyes.

**Respiratory or Skin Sensitization**

**Product:** May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.

**Carcinogenicity**

**Product:** Suspected of causing cancer.

**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

SODIUM  
COBALTINITRITE Overall evaluation: 2B. Possibly carcinogenic to humans.

**US. National Toxicology Program (NTP) Report on Carcinogens:**

No carcinogenic components identified

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):**

No carcinogenic components identified

**Germ Cell Mutagenicity**

**In vitro**

**Product:** No mutagenic components identified

**In vivo**

**Product:** No mutagenic components identified

**Reproductive Toxicity**

**Product:** No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Aspiration Hazard**

**Product:** Not classified

**Other Effects:** None known.

**12. Ecological information**

**Ecotoxicity:**

**Acute hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Chronic hazards to the aquatic environment:**

**Fish**

**Product:** No data available.

**Aquatic Invertebrates**

**Product:** No data available.

**Toxicity to Aquatic Plants**

**Product:** No data available.

**Persistence and Degradability**

**Biodegradation**

**Product:** There are no data on the degradability of this product.

**BOD/COD Ratio**

**Product:** No data available.

**Bioaccumulative Potential**

**Bioconcentration Factor (BCF)**

**Product:** No data available on bioaccumulation.

**Partition Coefficient n-octanol / water (log Kow)**

**Product:** No data available.

**Mobility in Soil:** No data available.

**Known or predicted distribution to environmental compartments**

SODIUM  
COBALTINITRITE No data available.

**Other Adverse Effects:** The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**13. Disposal considerations**

**Disposal instructions:** Discharge, treatment, or disposal may be subject to national, state, or local laws.

**Contaminated Packaging:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14. Transport information**

**DOT**

UN Number:	UN 1479
UN Proper Shipping Name:	Oxidizing solid, n.o.s.(SODIUM COBALTINITRITE)
Transport Hazard Class(es)	
Class(es):	5.1
Label(s):	5.1
Packing Group:	II
Marine Pollutant:	No

**IMDG**

UN Number: UN 1479  
 UN Proper Shipping Name: OXIDIZING SOLID, N.O.S.(SODIUM COBALTINITRITE)  
 Transport Hazard Class(es):  
   Class(es): 5.1  
   Label(s): 5.1  
   EmS No.: F-A, S-Q  
 Packing Group: II  
 Marine Pollutant: No

**IATA**

UN Number: UN 1479  
 Proper Shipping Name: Oxidizing solid, n.o.s.(SODIUM COBALTINITRITE)  
 Transport Hazard Class(es):  
   Class(es): 5.1  
   Label(s): 5.1  
 Marine Pollutant: No  
 Packing Group: II

**15. Regulatory information**

**US Federal Regulations**

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**  
 None present or none present in regulated quantities.

**CERCLA Hazardous Substance List (40 CFR 302.4):**  
 None present or none present in regulated quantities.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Acute (Immediate)  Chronic (Delayed)  Fire  Reactive  Pressure Generating

**SARA 302 Extremely Hazardous Substance**  
 None present or none present in regulated quantities.

**SARA 304 Emergency Release Notification**  
 None present or none present in regulated quantities.

**SARA 311/312 Hazardous Chemical**

Chemical Identity	Threshold Planning Quantity
SODIUM COBALTINITRITE	500 lbs

**SARA 313 (TRI Reporting)**

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
SODIUM COBALTINITRITE	10000 lbs	25000 lbs.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)**  
 None present or none present in regulated quantities.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**  
 None present or none present in regulated quantities.



## US State Regulations

### US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

### US. New Jersey Worker and Community Right-to-Know Act

SODIUM COBALTINITRITE Listed

### US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

### US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

### US. Rhode Island RTK

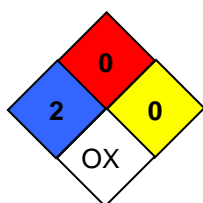
SODIUM COBALTINITRITE Listed

## Inventory Status:

Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	Not in compliance with the inventory.
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	Exempt
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

## 16. Other information, including date of preparation or last revision

## NFPA Hazard ID



	Flammability
	Health
	Reactivity
	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe  
 OXY: Oxidizer

<b>Issue Date:</b>	11-24-2014
<b>Revision Date:</b>	No data available.
<b>Version #:</b>	1.0
<b>Further Information:</b>	No data available.

**Disclaimer:**

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