

DATE: 02/10/97  
INDEK: D70382808

ACCT: 888235001  
CAT NO: S280100

PO NBR: 2128

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\*\*\*\* MATERIAL SAFETY DATA SHEET \*\*\*\*

Sodium Cobaltinitrite  
21137

\*\*\*\* SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION \*\*\*\*

MSDS Name: Sodium Cobaltinitrite  
Catalog Numbers:  
S280 100, S280-100, S280100, S80178  
Synonyms:  
Company Identification: Fisher Scientific  
1 Reagent Lane  
Fairlawn, NJ 07410  
For information, call: 201-796-7100  
Emergency Number: 201-796-7100  
For CHEMTREC assistance, call: 800-424-9300

\*\*\*\* SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS \*\*\*\*

CAS#	Chemical Name	%	EINECS#
13600-98-1	Sodium Cobaltinitrate	99	237-077-7

Hazard Symbols: O  
Risk Phrases: 8

\*\*\*\* SECTION 3 - HAZARDS IDENTIFICATION \*\*\*\*

EMERGENCY OVERVIEW

Appearance: Yellow to brown-red crystalline powder.  
Warning! May cause respiratory tract irritation. May cause allergic respiratory reaction. May cause allergic skin reaction. May cause liver damage. May cause fetal effects based upon animal studies. Sensitizer. May cause eye and skin irritation. May cause cardiac disturbances. May cause lung damage. May cause digestive tract irritation with nausea, vomiting, and diarrhea. May cause cancer based on animal studies.  
Target Organs: Blood, heart, central nervous system, liver, thyroid.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause liver damage. May cause digestive tract disturbances. Can cause nervous system damage. Exposure may cause anemia and other blood abnormalities.  
May cause cardiac and thyroid abnormalities.

Inhalation:

May cause allergic respiratory reaction. May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. May cause effects similar to those described for ingestion.

Chronic:

Chronic inhalation and ingestion may cause effects similar to those of acute inhalation and ingestion. May cause fetal effects.  
Cobalt compounds may cause cancer based on animal studies.

\*\*\*\* SECTION 4 - FIRST AID MEASURES \*\*\*\*

Eyes:

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

Skin:

Get medical aid immediately. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion:

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Get medical aid immediately.

Inhalation:

Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

The use of antidotal treatment for cobalt exposure should be determined only by qualified medical personnel.

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\*\*\*\* SECTION 5 - FIRE FIGHTING MEASURES \*\*\*\*

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Combustion generates toxic fumes.

Extinguishing Media:

For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.

Autoignition Temperature: Not available.

Flash Point: Not available.

NFPA Rating: Not published.

Explosion Limits, Lower: Not available.

Upper: Not available.

\*\*\*\* SECTION 6 - ACCIDENTAL RELEASE MEASURES \*\*\*\*

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions.

\*\*\*\* SECTION 7 - HANDLING and STORAGE \*\*\*\*

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Keep container tightly closed. Do not get on skin or in eyes. Do not ingest or inhale.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible substances.

\*\*\*\* SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION \*\*\*\*

Engineering Controls:

Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Sodium Cobaltinitrate	none listed	as Co: 0.05 mg/m <sup>3</sup> TWA (listed under ** no name **)	0.1 mg/m <sup>3</sup> TWA (listed under ** no name **)

OSHA Vacated PELs:

Sodium Cobaltinitrate:  
No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.

\*\*\*\* SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES \*\*\*\*

Physical State: Solid  
Appearance: Yellow to brown-red crystalline powder  
Odor: none reported  
pH: Not available.  
Vapor Pressure: Negligible.  
Vapor Density: Not available.  
Evaporation Rate: negligible  
Viscosity: Not available.  
Boiling Point: Not applicable.  
Freezing/Melting Point: Not available.  
Decomposition Temperature: Not available.  
Solubility: Soluble in water.  
Specific Gravity/Density: Not available.  
Molecular Formula: CoN6Na3O12  
Molecular Weight: 403.9356

\*\*\*\* SECTION 10 - STABILITY AND REACTIVITY \*\*\*\*

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Chemical Stability:  
Stable under normal temperatures and pressures.  
Conditions to Avoid:  
High temperatures, incompatible materials.  
Incompatibilities with Other Materials:  
Amines, organic materials, reducing agents, strong acids, strong oxidizers.  
Hazardous Decomposition Products:  
Nitrogen oxides.  
Hazardous Polymerization: Has not been reported.

\*\*\*\* SECTION 11 - TOXICOLOGICAL INFORMATION \*\*\*\*

RTECS#: CAS# 13600-98-1: GF9480000  
LD50/LC50:  
Not available.  
Carcinogenicity:  
Sodium Cobaltinitrate -  
California: carcinogen, as \*\* undefined \*\*  
IARC: Group 2B carcinogen (listed as \*\* undefined \*\*)  
Epidemiology:  
No information available.  
Teratogenicity:  
Specific Developmental Abnormalities: Craniofacial, intraperitoneal mouse TDLo=50mg/kg.  
Reproductive Effects:  
No information available.  
Neurotoxicity:  
No information available.  
Mutagenicity:  
Please refer to RTECS# GF9480000 for specific information.  
Other Studies:  
None.

\*\*\*\* SECTION 12 - ECOLOGICAL INFORMATION \*\*\*\*

Ecotoxicity:  
No information available.  
Environmental Fate:  
No information reported.  
Physical/Chemical:  
No information available.  
Other:  
Not available.

\*\*\*\* SECTION 13 - DISPOSAL CONSIDERATIONS \*\*\*\*

Dispose of in a manner consistent with federal, state, and local regulations.  
RCRA D-Series Maximum Concentration of Contaminants: Not listed.  
RCRA D-Series Chronic Toxicity Reference Levels: Not listed.  
RCRA F-Series: Not listed.  
RCRA P-Series: Not listed.  
RCRA U-Series: Not listed.  
Not listed as a material banned from land disposal according to RCRA.

\*\*\*\* SECTION 14 - TRANSPORT INFORMATION \*\*\*\*

US DOT  
No information available  
IMO  
No information available.  
IATA  
No information available.  
RID/ADR  
No information available.  
Canadian TDG  
No information available.

\*\*\*\* SECTION 15 - REGULATORY INFORMATION \*\*\*\*

A. Federal  
TSCA  
CAS# 13600-98-1 is not listed on the TSCA inventory.  
It is for research and development use only.  
Health & Safety Reporting List  
None of the chemicals are on the Health & Safety Reporting List.  
Chemical Test Rules  
None of the chemicals in this product are under a Chemical Test Rule.  
Section 12b  
None of the chemicals are listed under TSCA Section 12b.  
TSCA Significant New Use Rule  
None of the chemicals in this material have a SNUR under TSCA.  
SARA  
Section 302 (RQ)  
None of the chemicals in this material have an RQ.  
Section 302 (TPQ)  
None of the chemicals in this product have a TPQ.

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Section 313  
No chemicals are reportable under Section 313.  
Clean Air Act:  
This material does not contain any hazardous air pollutants.  
This material does not contain any Class 1 Ozone depletors.  
This material does not contain any Class 2 Ozone depletors.  
Clean Water Act:  
None of the chemicals in this product are listed as Hazardous Substances under the CWA.  
None of the chemicals in this product are listed as Priority Pollutants under the CWA.  
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.  
OSHA:  
None of the chemicals in this product are considered highly hazardous by OSHA.

B. State  
Not present on state lists from CA, PA, MN, MA, FL, or NJ.  
The following statement(s) is(are) made in order to comply with the California Safe Drinking Water Act:  
WARNING: This product contains Sodium Cobaltinitrate, listed as  $\phi$  \*\* undefined \*\*, a chemical known to the state of California to cause cancer.  
California No Significant Risk Level:  
None of the chemicals in this product are listed.

C. International  
Canada  
None of the chemicals in this product are listed on the DSL/NDSL list.  
CAS# 13600-98-1 is not listed on Canada's Ingredient Disclosure List.  
European Labeling in Accordance with EC Directives  
Hazard Symbols: O  
Risk Phrases:  
R 8 Contact with combustible material may cause fire.  
Safety Phrases:  
S 17 Keep away from combustible material.

Exposure Limits:  
OEL-ARAB Republic of Egypt:TWA 0.2 mg(As)/m3. OEL-AUSTRALIA:TWA 0.05 mg(As)/m3;Carcinogen. OEL-BELGIUM:TWA 0.2 mg(As)/m3. OEL-CZECHOSLOVAKIA :TWA 0.2 mg(As)/m3;STEL 0.6 mg(As)/m3. OEL-DENMARK:TWA 0.05 mg(As)/m3 OEL-FINLAND;Carcinogen. OEL-FRANCE:TWA 0.2 mg(As)/m3. OEL-HUNGARY:STEL 0.5 mg(As)/m3;Carcinogen. OEL-INDIA:TWA 0.2 mg(As)/m3. OEL-THE PHILI PPINES:TWA 0.5 mg(As)/m3. OEL-POLAND:TWA 0.3 mg(As)/m3. OEL-SWEDEN:TWA 0.03 mg(As)/m3;Carcinogen. OEL-SWITZERLAND:TWA 0.1 mg(As)/m3;Carcinogen JAN9. OEL-THAILAND:TWA 0.5 mg(As)/m3. OEL-TURKEY:TWA 0.5 mg(As)/m3 OEL-UNITED KINGDOM:TWA 0.2 mg(As)/m3. OEL IN BULGARIA, COLOMBIA, JORD AN, KOREA check ACGIH TLV. OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGI TLV

\*\*\*\* SECTION 16 - ADDITIONAL INFORMATION \*\*\*\*

Additional Information:  
No additional information available.  
MSDS Creation Date: 10/17/1995 Revision #1 Date: 3/04/1996

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Fisher 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 Fisher has been advised of the possibility of such damages.