

SECTION 1: PRODUCT & COMPANY IDENTIFICATION

1.1 Product Identifiers

Product Description: Sodium Cobalt Oxide powder

CAS Number: The CAS number is unknown or has not been assigned to this material

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Identified Uses: Laboratory chemicals; synthesis of substances; R&D

1.3 Details of the Supplier of the Safety Data Sheet

Company: NEI Corporation

Address: 400 Apgar Drive, Unit E – Somerset, NJ 08873 – United States of America

Phone: +1 (732) 868-3141

Fax: +1 (732) 868-3143

Email: productinfo@neicorporation.com

1.4 Emergency Telephone Number

Manufacturer: +1 (732) 868-3142 (9am to 6pm EST / UTC -0500)

U.S. Poison Control Center: +1-800-222-1222

SECTION 2: HAZARDS IDENTIFICATION


2.1 Classification of the Substance or Mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin Sensitization (Category 1), H317

Carcinogenicity (Category 2B), H350

2.2 GHS Label elements, including precautionary statements

Pictogram(s): 

Signal Word: Danger

Hazard Statement(s):

H317 May cause an allergic skin reaction

H350 May cause cancer

Precautionary Statement(s):

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves, protective clothing, & eye protection.

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P308 + P313 IF EXPOSED OR CONCERNED: Get medical advice / attention.

P321 Specific treatment (see supplemental first aid instructions on this label).

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

None

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Component Name	Synonym	Formula	CAS #	Concentration
Sodium Cobalt Oxide	n/a	Na _{0.7} CoO _{2+δ}	n/a	≤ 100%
Hazards: Skin Sensitization (Cat. 1, H317); Carcinogenicity (Cat. 2B, H350)				

Sodium Cobalt Oxide (Na_{0.7}CoO_{2+δ}) powder

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice:

Move out of exposed area. Seek medical attention if irritation occurs. Show this SDS to the doctor in attendance.

After Inhalation:

If breathed in, move person into fresh air. If not breathing, give artificial respiration and seek medical attention.

After Skin Contact:

Wash off with soap and plenty of water. Seek medical attention if irritation occurs.

After Eye Contact:

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After Swallowing:

Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

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 section 11.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed

No Data Available

SECTION 5: FIREFIGHTING MEASURES

5.1 Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special Hazards Arising from the Substance or Mixture

Sodium oxides, Cobalt oxides

5.3 Advice for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Other Information

No Data Available

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment, and Emergency Procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental Precautions

Do not let product enter drains.

6.3 Methods and Materials for Containment and Cleaning Up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to Other Sections

For safe handling, see Section 7; for personal protection, see Section 8; for disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Appropriate personal protective equipment should be used at all times. See Section 2.2 for more.

7.2 Conditions for Safe Storage (including any incompatibilities)

Store sealed, in a dry and well-ventilated place. Avoid exposure to moisture / humidity. Avoid contamination with incompatible materials (see Section 10.5).

7.3 Specific End Uses

A part from the uses mentioned in section 1.2 no other specific uses are stipulated.

Sodium Cobalt Oxide (Na_{0.7}CoO_{2+x}) powder

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control Parameters**

Occupational exposure limit values are unknown for this product.

8.2 Exposure Controls**Appropriate Engineering Controls**

Handle in accordance with good industrial hygiene and safety practice. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Personal Protective Equipment**Eye / Face Protection:**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

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:

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory Protection:

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of Environmental Exposure

Prevent further leakage or spillage if safe to do so. Discharge into the environment should be avoided. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties**

Form:	Solid
Color:	Dark brown
Odor:	No data available
pH (20 °C):	No data available
Melting point/range:	No data available
Specific Gravity:	No data available
Relative Density:	No data available
Bulk Density:	No data available
Viscosity:	No data available
Boiling Point:	No data available
Flashpoint:	No data available
Ignition Temperature:	No data available
Auto-ignition Temperature:	No data available
Lower Explosion Limit:	No data available
Upper Explosion Limit:	No data available
Vapor Pressure (32 °C):	No data available
Vapor Density:	No data available
Water Solubility:	No data available
Evaporation Rate:	No data available
Decomposition Temperature:	No data available

Sodium Cobalt Oxide (Na_{0.7}CoO_{2+δ}) powder

9.2 Other Information

None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No Data Available

10.2 Chemical Stability

Stable under recommended storage conditions (see Section 7.2)

10.3 Possibility of Hazardous Reactions

No Data Available

10.4 Conditions to Avoid

Avoid exposure to humidity & moisture

10.5 Incompatible Materials

Strong oxidizing agents

10.6 Hazardous Decomposition Products

In event of fire: Sodium oxides, cobalt oxides (no other data available)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity

Oral LD50: No Data Available

Inhalation LC50: No Data Available

Dermal LD50: No Data Available

Other Information: No Data Available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 2B: Possibly carcinogenic to humans.

A3: Animal carcinogen – agent is carcinogenic in experimental animals at a relatively high dose, by routes of administration, at sites, of histologic types, or by mechanisms not considered relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or level of exposure.

ACGIH:

NTP: No component of this product (present at levels greater than or equal to 0.1%) is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product (present at levels greater than or equal to 0.1%) is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No Data Available

Teratogenicity

No Data Available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No Data Available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No Data Available

Aspiration hazard

No Data Available

Additional Information

RTECS: Not available

Cobalt is an experimental neoplastigen and tumorigen. It is an experimental carcinogen of the connective tissue and lungs. Cobalt metal and inorganic compounds are classified as an animal carcinogen by the ACGIH. Ingestion may cause burning in the mouth, esophagus, and stomach. Inhalation of ducts and fumes may cause irritation of the respiratory tract and labored breathing and coughing. Sensitization, nausea, flushing of the face and ringing of the ears is also possible. Chronic ingestion may result in pericardia effusion, polycythemia, cardiac failure, vomiting, convulsions, and thyroid enlargement.

Note: The chemical, physical, and toxicological properties of this product have not been thoroughly investigated.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No Data Available

12.2 Persistence and Degradability

No Data Available

12.3 Bioaccumulative Potential

No Data Available

12.4 Mobility in Soil

No Data Available

12.5 Results of PBT and vPvB Assessment

PBT/vPvB assessment not available as chemical safety assessment not conducted

12.6 Other Adverse Effects

No Data Available

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods – Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

13.2 Waste Treatment Methods – Contaminated Packaging

Dispose of properly as you would with unused product.

SECTION 14: TRANSPORT INFORMATION

14.1 Department of Transportation (DOT - US)

Not dangerous goods

14.2 International Maritime Dangerous Goods (IMDG)

Not dangerous goods

14.3 International Air Transport Association (IATA)

Not dangerous goods

14.4 Additional Transport Information

HS Classification #: 2822.00

Schedule B #: 2822.00.0000

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

CALIFORNIA PROPOSITION 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

15.2 Chemical Safety Assessment

A chemical safety assessment was not carried out for this product.

SECTION 16: OTHER INFORMATION

REACH Number

A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

HMIS Classification

Health Hazard: 2
Flammability Hazard: 0
Physical Hazard: 0

NFPA Rating

Health Hazard: 2
Flammability Hazard: 0
Reactivity Hazard: 0

Further Information

NEI has attempted to provide current and accurate information to the best of its knowledge. NEI makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person. Employers should use this information only as a supplement to other information gathered by them and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

- END OF MSDS -