

## SAFETY DATA SHEET

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

|              |  |
|--------------|--|
| Product name | Sodium hexanitrocobaltate (III)                  |
| CAS number   | 13600-98-1                                       |
| Synonyms     | Sodium cobaltinitrite; Trisodium Hexanitrocobalt |

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

|                 |                       |
|-----------------|-----------------------|
| Identified uses | Laboratory chemicals. |
|-----------------|-----------------------|

#### 1.3 Details of the supplier of the safety data sheet

|           |  |
|-----------|--|
| Company   | Lab Alley, LLC<br>12501 Pauls Valley Road<br>Austin, Texas 78737<br>U.S.A. |
| Telephone | 512-668-9918   |
| Fax       | 512-886-4008   |

#### 1.4 Emergency telephone

|                   |                              |          |
|-------------------|------------------------------|----------|
| Emergency Phone # | US & Canada: 1-800-535-5053  | INFOTRAC |
|                   | International 1-352-323-3500 | INFOTRAC |

### SECTION 2: Hazards identification


#### 2.1 Classification of the substance or mixture

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

|  |            |
|--|------------|
| Oxidizing Solids                                 | Category 2 |
| Skin Corrosion/Irritation                        | Category 2 |
| Serious Eye Damage/Eye Irritation                | Category 2 |
| Respiratory Sensitization                        | Category 1 |
| Skin Sensitization                               | Category 1 |
| Carcinogenicity                                  | Category 2 |
| Specific Target Organ Toxicity (single exposure) | Category 3 |

Target Organ(s) - Respiratory system

## 2.2 GHS Label elements, including precautionary statements

|                          |   |
|--------------------------|---|
| Pictogram                |    |
| Signal Word              | Danger  |
| Hazard statements        | <p>May intensify fire; oxidizer.<br/>Causes skin irritation.<br/>Causes serious eye irritation.<br/>May cause an allergic skin reaction.<br/>May cause allergy or asthma symptoms or breathing difficulties if inhaled.<br/>May cause respiratory irritation.<br/>Suspected of causing cancer.</p>  |
| Precautionary statements | <p>Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Wash face, hands, and any exposed skin thoroughly after handling. In case of inadequate ventilation wear respiratory protection. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Keep/Store away from clothing/ other combustible materials. Take any precaution to avoid mixing with combustibles. Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Response: If exposed or concerned, get medical attention/advice.</p> <p>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.</p> <p>IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs, get medical advice/attention.</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.</p> <p>Fire: In case of fire, use CO2, dry chemical, or foam for extinction.</p> |

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed.

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

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

None identified.

## SECTION 3: Composition/information on ingredients

### 3.1 Components

| Chemical name                  | Common name and synonyms                         | CAS number | Concentration |
|--------------------------------|--|------------|---------------|
| Sodium hexanitrocobaltate(III) | Sodium cobaltinitrite; Trisodium Hexanitrocobalt | 13600-98-1 | > 95%         |

## SECTION 4: First aid measures

### 4.1 Description of first-aid measures

#### General advice

|                                |   |
|--------------------------------|---|
| <b>If inhaled</b>              | Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.                      |
| <b>In case of skin contact</b> | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention.                       |
| <b>In case of eye contact</b>  | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| <b>If swallowed</b>            | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.           |

### 4.2 Most important symptoms and effects, both acute and delayed

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

### 4.3 Indication of any immediate medical attention and special treatment needed

If symptoms persist, call a physician and treat symptomatically.

## SECTION 5: Firefighting measures

## 5.1 Extinguishing media

**Suitable extinguishing media** Dry chemical powder, alcohol-resistant foam, Carbon dioxide (CO<sub>2</sub>), water spray.

**Unsuitable extinguishing media** No information available.

## 5.2 Specific hazards arising from the substance or mixture

May ignite combustibles (wood paper, oil, clothing, etc.). Oxidizer; contact with combustible/organic material may cause fire.

Hazardous Combustion Products: Nitrogen oxides (NO<sub>x</sub>), Cobalt oxides.

## 5.3 Special protective equipment and precautions for firefighters

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

## 5.4 Further information

**Flash Point** No information available.

**Autoignition Temperature** No information available.

### Explosion limits

**Upper** No data available.

**Lower** No data available.

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

### NFPA

| Health | Flammability | Instability | Physical hazards |
|--------|--------------|-------------|------------------|
| 2      | 1            | 2           | OX               |

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

### 6.2 Environmental precautions

Should not be released into the environment. Do not allow material to contaminate groundwater system. Do not flush into surface water or sanitary sewer system.

### 6.3 Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Soak up with inert absorbent material.

## 6.4 Reference to other sections

See Section 2 for full list of hazard and precaution statements. See Section 12 for additional Ecological Information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

#### Precautions on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. Keep away from clothing and other combustible materials. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Keep containers tightly closed in a dry, cool, and well-ventilated place. Do not store near combustible materials.

#### Incompatibilities

Strong oxidizing agents, strong acids, reducing agents, amines, combustible material.

## SECTION 8: Exposure controls/personal protection

### 8.1 Occupational exposure limits

#### US. ACGIH Threshold Limit Values

| Component                      | Type | Value                  |
|--------------------------------|------|------------------------|
| Trisodium hexanitritocobaltate | TWA  | 0.02 mg/m <sup>3</sup> |

#### Biological occupational exposure limits

No information available.

### 8.2 Exposure controls

#### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Personal protective equipment

##### Eye/face protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

#### **Skin protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### **Body Protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

#### **Respiratory protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

#### **Control of environmental exposure**

No information available.

## **SECTION 9: Physical and chemical properties**

### **9.1 Information on basic physical and chemical properties**

|   |                          |
|---|--------------------------|
| Physical State                            | Solid                    |
| Appearance                                | Amber                    |
| Odor                                      | Odorless                 |
| Odor Threshold                            | No information available |
| pH  | 5 100g/L aq sol (20°C)   |
| Melting Point/Range                       | 220 °C / 428 °F          |
| Boiling Point/Range                       | No information available |
| Evaporation Rate                          | Not applicable           |
| Flammability (solid)                      | No information available |
| Flammability or explosive limit           | No data available        |
| Upper                                     |                          |
| Lower                                     |                          |
| Vapor Pressure                            | No information available |
| Vapor Density                             | Not applicable           |
| Density                                   | No information available |
| Solubility                                | No information available |
| Partition coefficient;<br>n-octanol/water | No data available        |
| Autoignition Temp                         | No information available |
| Decomposition Temp                        | No information available |
| Viscosity                                 | Not applicable           |
| Molecular Formula                         | CoN6Na3O12               |
| Molecular Weight                          | 403.94 g/mol             |
| VOC Content(%)                            | No information available |

Oxidizing properties

Oxidizer

## 9.2 Other safety information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Known reactive hazard.

### 10.2 Chemical stability

Stable under normal conditions. Oxidizer; contact with combustible/organic material may cause fire.

### 10.3 Possibility of hazardous reactions

None under normal processing.

### 10.4 Conditions to avoid

Incompatible products, excess heat, dust formation, combustible material.

### 10.5 Incompatible materials

Strong oxidizing agents, strong acids, reducing agents, amines, combustible material.

### 10.6 Hazardous decomposition products

Nitrogen oxides (NO<sub>x</sub>), Cobalt oxides.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Product Information, Component Information

#### Acute toxicity

No information available.

#### Skin corrosion/irritation

Irritating to skin.

#### Serious eye damage/eye irritation

Irritating to eyes.

#### Respiratory or skin sensitization

Irritating to respiratory system. May cause sensitization by skin contact.

#### Germ cell mutagenicity

No information available.

**Carcinogenicity**

| Component                      | CAS        | IARC       | NTP                    | ACGIH | OSHA       | Mexico     |
|--------------------------------|------------|------------|------------------------|-------|------------|------------|
| Trisodium hexanitritocobaltate | 13600-98-1 | Not listed | Reasonably Anticipated | A3    | Not listed | Not listed |

**Specific target organ toxicity - single exposure**

Respiratory system.

**Specific target organ toxicity - repeated exposure**

None known.

**Reproductive toxicity**

No information available.

**Chronic effects**

Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain, or flushing.

**11.2 Additional Information**

The toxicological properties have not been fully investigated.

## SECTION 12: Ecological information

**12.1 Toxicity**

Do not empty into drains. May cause long-term adverse effects in the environment. Do not allow material to contaminate groundwater system.

**12.2 Persistence and degradability**

Based on information available, product may persist.

**12.3 Bio accumulative potential**

No information available.

**12.4 Mobility in soil**

Likely mobile in the environment due to its water solubility.

**12.5 Results of PBT and vPvB assessment**

No information available.

**12.6 Endocrine disrupting properties**

No information available.

**12.7 Other adverse effects**

No information available.

## SECTION 13: Disposal considerations



## 13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### SECTION 14: Transport information

#### DOT (US)

|                      |                         |
|----------------------|-------------------------|
| UN-no                | UN1479                  |
| Proper Shipping Name | Oxidizing solid, n.o.s. |
| Hazard Class         | 5.1                     |
| Packing Group        | II                      |

#### IMDG

|                      |                         |
|----------------------|-------------------------|
| UN-no                | UN1479                  |
| Proper Shipping Name | Oxidizing solid, n.o.s. |
| Hazard Class         | 5.1                     |
| Packing Group        | II                      |

#### IATA

|                      |                         |
|----------------------|-------------------------|
| UN-no                | UN1479                  |
| Proper Shipping Name | Oxidizing solid, n.o.s. |
| Hazard Class         | 5.1                     |
| Packing Group        | II                      |

### SECTION 15: Regulatory information

**US federal regulations** This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**  
Not applicable.

**CERCLA Hazardous Substance List (40 CFR 302.4)**  
Not applicable.

**SARA 304 Emergency release notification**  
Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**  
Not regulated.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**  
**SARA 302 Extremely hazardous substance**  
Not listed.

**SARA 311/312 Hazardous**

See Section 2 for more information.

**SARA 313 (TRI reporting)**

Regulated, Cobalt Compounds (CAS #N096).

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Regulated, Trisodium hexanitritocobaltate (CAS #13600-98-1).

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act**

Not regulated.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace**

Not listed.

**US state regulations****US. Massachusetts RTK - Substance List**

Not listed.

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

Listed, Cobalt Compounds.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Listed, Cobalt Compounds.

**California Proposition 65**

Not listed.

**SECTION 16: Other information**

Issue date: 09/27/2024

**SECTION 17: Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.