

**SECTION 1. IDENTIFICATION**

|   |  |
|---|--|
| <b>GHS product identifier</b>                                   | Ceramic Marking Ink  |
| <b>Chemical name</b>  | Marking Ink  |
| <b>Other means of identification</b>                            | Blue Marking Ink, Blue Pen Ink   |
| <b>Supplier's details</b>                                       | CoorsTek, Inc.<br>14143 Denver West Parkway, Suite 400<br>Golden, CO 80401<br>Phone: +1 303 271 7100<br>Fax: +1 303 271 7009 |
| <b>Emergency telephone number<br/>(with hours of operation)</b> | +1 303 271 7100<br>8am-5pm MDT (M-F)   |

**SECTION 2. HAZARDS IDENTIFICATION**

**OSHA/HCS status** This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

**Classification of the substance or mixture** FLAMMABLE LIQUIDS - Category 3  
ACUTE TOXICITY (oral) - Category 3  
SKIN CORROSION/IRRITATION - Category 2  
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A  
SKIN SENSITIZATION - Category 1  
AQUATIC HAZARD (ACUTE) - Category 1  
AQUATIC HAZARD (LONG-TERM) - Category 1

**GHS LABEL ELEMENTS**

**Hazard pictograms**



**Signal word** Danger

**Hazard statements** H226 - Flammable liquid and vapor  
H301 - Toxic if swallowed  
H319 - Causes serious eye irritation  
H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction.  
H410 - Very toxic to aquatic life with long lasting effects

**SECTION 2. HAZARDS IDENTIFICATION, CONTINUED**
**PRECAUTIONARY STATEMENTS**

- General** Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** P280 - Wear protective gloves. Wear eye or face protection.  
 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
 P241 - Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.  
 P242 - Use only non-sparking tools.  
 P243 - Take precautionary measures against static discharge.  
 P233 - Keep container tightly closed.  
 P273 - Avoid release to the environment.  
 P261 - Avoid breathing vapor.  
 P270 - Do not eat, drink, or smoke when using this product.  
 P264 - Wash hands thoroughly after handling.  
 P272 - Contaminated work clothing should not be allowed out of the workplace.
- Response** P391 - Collect spillage.  
 P301 + P310 + P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth.  
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.  
 P302 + P352 + P362-2 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing.  
 P333 + P313 - If skin irritation or rash occurs: Get medical attention.  
 P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P337 + P313 - If eye irritation persists: Get medical attention.
- Storage** P405 - Store locked up.  
 P403 - Store in a well-ventilated place.  
 P235 - Keep cool.
- Disposal** P501 - Dispose of contents and container in accordance with all local, regional, national, and international regulations.

**Hazards not otherwise classified** None known

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Substance/mixture** Mixture

**Chemical name** Marking Ink

**Other means of identification** Blue Marking Ink, Blue Pen Ink

**CAS NUMBER/OTHER IDENTIFIERS**

**CAS number** Not applicable

**Product code** Not available

| INGREDIENT NAME                 | %        | CAS NUMBER |
|---------------------------------|----------|------------|
| Cobalt oxide                    | 60 - 100 | 1307-96-6  |
| Turpentine, oil                 | 10 - 30  | 8006-64-2  |
| Bismuth hydroxide nitrate oxide | 5 - 10   | 1304-85-4  |
| Sorbitan stearate               | 1 - 5    | 1338-41-6  |
| Sodium nitrite                  | 0.1 - 1  | 7632-00-0  |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4. FIRST AID MEASURES****DESCRIPTION OF NECESSARY FIRST AID MEASURES**

- Eye contact** Flush with tepid water for at least 15 minutes while holding eyelids open. Seek medical attention if irritation occurs
- Inhalation** When handling cobalt oxide to mix, wear a half-face respirator. Move to area free from risk of further exposure. Administer oxygen or artificial respiration, as needed. Get medical attention. Flush contaminated skin with plenty of water. Get medical attention if symptoms occur.
- Skin contact** Wash with plenty of soap and water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure.
- Ingestion** Not a likely route of exposure. If large amounts of product are ingested, do not induce vomiting and seek prompt medical attention. Never give anything by mouth to an unconscious person.

**MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED**

- General** Product may vaporize and cause irritation to eyes, skin, and respiratory tract. In case of chronic exposure, may cause allergic sensitization, kidney irritation, albuminuria, and hematuria.

**Potential acute health effects**

- Eye contact** Causes serious eye irritation
- Inhalation** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** Toxic if swallowed. Irritating to mouth, throat and stomach.

**Over-exposure signs/symptoms**

- Eye contact** Adverse symptoms may include the following:
- Pain or irritation
  - Watering
  - Redness
- Inhalation** No known significant effects or critical hazards
- Skin contact** Adverse symptoms may include the following:
- Irritation
  - Redness
- Ingestion** No known significant effects or critical hazards

**SECTION 4. FIRST AID MEASURES, CONTINUED**

**INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY**

- Notes to physician** In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** No specific treatment
- Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.  
  
See toxicological information (Section 11).

**SECTION 5. FIRE-FIGHTING MEASURES**

**EXTINGUISHING MEDIA**

- Suitable extinguishing media** Use dry chemical, CO<sub>2</sub>, water spray (fog), or foam.
- Unsuitable extinguishing media** Do not use water jet or water-based fire extinguishers.
- Specific hazards arising from the chemical** Flammable liquid and vapor. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. This material is very toxic to aquatic life with longlasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides
  - Metal oxide/oxides
- Special protective actions for firefighters** Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for firefighters** Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT & EMERGENCY PROCEDURES

- For non-emergency personnel** No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in “For non-emergency personnel”.
- Environmental precautions** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### METHODS & MATERIALS FOR CONTAINMENT AND CLEANING UP

- Spill** Secure area and obtain necessary personal protective equipment. Cover spill with inert material (such as Fuller’s Earth, sand, oil absorbent, etc.), scoop up material, and place in appropriate containers for disposal. Do not allow material to enter sewer or waterway-confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

## SECTION 7. HANDLING AND STORAGE

### PRECAUTIONS FOR SAFE HANDLING

- Protective measures** Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame, or any other ignition source. Use explosion-proof electrical (ventilating, lighting, and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

**SECTION 7. HANDLING AND STORAGE, CONTINUED**

**Advice on general occupational hygiene** Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

**Conditions for safe storage, including any incompatibilities** Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**CONTROL PARAMETERS**

**Occupational exposure limits**

| INGREDIENT NAME | EXPOSURE LIMITS   |
|-----------------|---|
| Cobalt oxide    | <b>ACGIH TLV (United States, 4/2014).</b><br>TWA: 0.02 mg/m <sup>3</sup> , (as Co) 8 hours.                   |
| Turpentine, oil | <b>OSHA PEL 1989 (United States, 3/1989).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 560 mg/m <sup>3</sup> 8 hours. |
|                 | <b>NIOSH REL (United States, 4/2013).</b><br>TWA: 100 ppm 10 hours.<br>TWA: 560 mg/m <sup>3</sup> 10 hours.   |
|                 | <b>OSHA PEL (United States, 2/2013).</b><br>TWA: 100 ppm 8 hours.<br>TWA: 560 mg/m <sup>3</sup> 8 hours.      |
|                 | <b>ACGIH TLV (United States, 6/2013). Skin sensitizer.</b><br>TWA: 20 ppm 8 hours.                            |

**Appropriate engineering controls** Use only with adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor, or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

**Environmental exposure controls** Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION, CONTINUED**

**INDIVIDUAL PROTECTION MEASURES**

- Hygiene measures** Follow good industrial hygiene practice.
- Eye/face protection** Recommended: Safety glasses with side-shields or splash goggles

**SKIN PROTECTION**

- Hand protection** Wear impervious gloves when handling product.
- Body protection** Not required under normal conditions of use
- Other skin protection** Not required under normal conditions of use

**RESPIRATORY PROTECTION** Not required under normal conditions of use. For air concentrations greater than the TLV, use a NIOSH/MSHA approved organic respirator with a full face piece. The evaluation of the need for respiratory protection should be determined by a professional industrial hygienist.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE**

- Physical state** Liquid
- Color** Black
- Odor** Turpentine
- Odor threshold** Not available
- pH** Not applicable
- Melting point** Not available
- Boiling point** 180°C (356°F)
- Flash point** Closed cup: 36°C (96.8°F)
- Evaporation rate** Not available
- Flammability (solid, gas)** Not available
- Lower and upper explosive (flammable) limits** Not available
- Vapor pressure** Not applicable
- Vapor density** 4.84 [Air = 1]



**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES, CONTINUED**

**Relative density** 1.5  
**Solubility** Insoluble in the following materials: cold water and hot water  
**Partition coefficient: n- octanol/water** Not available  
**Auto-ignition temperature** Not available  
**Decomposition temperature** Not available  
**Viscosity** 10%

**SECTION 10. STABILITY AND REACTIVITY**

**Reactivity** No specific test data related to reactivity available for this product or its ingredients.  
**Chemical stability** The product is stable.  
**Possibility of hazardous reactions** Under normal conditions of storage and use, hazardous reactions will not occur.  
**Conditions to avoid** Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind, or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.  
**Incompatible materials** Reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials, metals, acids, alkalis, and moisture.  
**Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

| PRODUCT/<br>INGREDIENT NAME | RESULT                | SPECIES | DOSE                    | EXPOSURE |
|-----------------------------|-----------------------|---------|-------------------------|----------|
| Cobalt oxide                | LD50 Oral             | Rat     | 202 mg/kg               | -        |
| Turpentine, oil             | LC50 Inhalation Vapor | Rat     | 19900 mg/m <sup>3</sup> | 1 hours  |
|                             | LC50 Inhalation Vapor | Rat     | 13700 mg/m <sup>3</sup> | 4 hours  |
|                             | LD50 Oral             | Rat     | 3956 mg/kg              | -        |
| Sodium nitrite              | LD50 Oral             | Rat     | 85 mg/kg                | -        |

**SECTION 11. TOXICOLOGICAL INFORMATION, CONTINUED**

**Irritation/Corrosion**

| PRODUCT/<br>INGREDIENT NAME | RESULT                 | SPECIES | DOSE | EXPOSURE           | OBSERVATION |
|-----------------------------|------------------------|---------|------|--------------------|-------------|
| Turpentine, oil             | Skin - Severe irritant | Human   | -    | 0.1%               | -           |
|                             | Skin - Severe irritant | Rabbit  | -    | 500 µL             |             |
| Sodium nitrite              | Eyes - Mild irritant   | Rabbit  | -    | 24 hours<br>500 mg | -           |

**Sensitization** No data available

**Carcinogenicity**

| NAME            | OSHA | IARC | NTP | ACGIH | EPA | NIOSH |
|-----------------|------|------|-----|-------|-----|-------|
| Cobalt oxide    | -    | 2B   | -   | A3    | -   | -     |
| Turpentine, oil | -    | -    | -   | A4    | -   | -     |

**Reproductive toxicity**

**Specific target organ toxicity (single exposure)** There is no data available

**Specific target organ toxicity (repeated exposure)** There is no data available

**Aspiration hazard**

| NAME            | RESULT                         |
|-----------------|--------------------------------|
| Turpentine, oil | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** Routes of entry anticipated: oral, dermal, inhalation

**POTENTIAL ACUTE HEALTH EFFECTS**

- Eye contact** Causes serious eye irritation
- Inhalation** Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Skin contact** Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** Toxic if swallowed. Irritating to mouth, throat, and stomach.

**SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS**

- Eye contact** Adverse symptoms may include the following:
  - Pain or irritation
  - Watering
  - Redness

**SECTION 11. TOXICOLOGICAL INFORMATION, CONTINUED**

**Inhalation** No known significant effects or critical hazards

**Skin contact** Adverse symptoms may include the following:  
Irritation  
Redness

**Ingestion** No known significant effects or critical hazards

**DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS FROM SHORT AND LONG TERM EXPOSURE**

**Short term exposure** No known significant effects or critical hazards

**Potential immediate effects** No known significant effects or critical hazards

**Potential delayed effects** No known significant effects or critical hazards

**Long term exposure** No known significant effects or critical hazards

**Potential immediate effects** No known significant effects or critical hazards

**Potential delayed effects** No known significant effects or critical hazards

**POTENTIAL CHRONIC HEALTH EFFECTS**

**General** Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** No known significant effects or critical hazards

**Mutagenicity** No known significant effects or critical hazards

**Teratogenicity** No known significant effects or critical hazards

**Developmental effects** No known significant effects or critical hazards

**Fertility effects** No known significant effects or critical hazards

**NUMERICAL MEASURE OF TOXICITY**

**Acute toxicity estimates**

| ROUTE               | ATE VALUE    |
|---------------------|--------------|
| Oral                | 252.9 mg/kg  |
| Dermal              | 6979.5 mg/kg |
| Inhalation (vapors) | 86.93 mg/L   |

**SECTION 11. TOXICOLOGICAL INFORMATION, CONTINUED**

| Toxicity | PRODUCT/<br>INGREDIENT NAME | RESULT                                     | SPECIES  | EXPOSURE |
|----------|-----------------------------|--|--|----------|
|          |                             | Acute EC50 159000<br>µg/L Marine water     | Algae - Tetraselmis chuii  | 72 hours |
|          |                             | Acute EC50<br>1600000 µg/L<br>Marine water | Algae - Tetraselmis chuii  | 96 hours |
|          | Sodium nitrite              | Acute LC50 1100<br>µg/L Fresh water        | Crustaceans -<br>Cherax quadricarinatus  | 48 hours |
|          |                             | Acute LC50 48<br>µg/L Fresh water          | Fish - Ictalurus punctatus -<br>Fingerling                                       | 96 hours |
|          |                             | Chronic NOEC<br>0.912 mg/L Marine<br>water | Fish - Hippocampus<br>abdominalis - Juvenile<br>(Fledgling, Hatchling, Weanling) | 35 days  |

| Persistence and degradability | PRODUCT/<br>INGREDIENT NAME | AQUATIC HALF-LIFE | PHOTOLYSIS | BIODEGRADABILITY |
|-------------------------------|-----------------------------|-------------------|------------|------------------|
|                               | Sodium nitrite              | -                 | -          | Readily          |

| Bioaccumulative potential | PRODUCT/<br>INGREDIENT NAME | LogP <sub>ow</sub> | BCF   | POTENTIAL |
|---------------------------|-----------------------------|--------------------|-------|-----------|
|                           | Cobalt oxide                | -                  | 15600 | High      |
|                           | Sodium nitrite              | -3.7               | -     | Low       |

**MOBILITY IN SOIL**




**Soil/water partition coefficient (K<sub>oc</sub>)** Not available

**Other adverse effects** No known significant effects or critical hazards

**SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld, or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains, and sewers.

**SECTION 14. TRANSPORT INFORMATION**

|                            | DOT  | IMDG  | IATA   |
|----------------------------|--|---|--|
| UN Number                  | UN1992   | UN1992  | UN1992   |
| UN proper shipping name    | FLAMMABLE LIQUID, TOXIC, N.O.S. (Turpentine, oil, Cobalt oxide) RQ (Sodium nitrite)  | FLAMMABLE LIQUID, TOXIC, N.O.S. (Turpentine, oil, Cobalt oxide). Marine pollutant (Cobalt oxide, Turpentine, oil) | FLAMMABLE LIQUID, TOXIC, N.O.S. (Turpentine, oil, Cobalt oxide)  |
| Transport hazard class(es) | 3 (6.1)<br>   | 3 (6.1)<br>                     | 3 (6.1)<br>           |
| Packing group              | III  | III   | III  |
| Environmental hazards      | No   | Yes   | No   |
| Additional information     | Reportable quantity 10000 lbs / 4540 kg [799.56 gal / 3026.7 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements. | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.                             | The environmentally hazardous substance mark may appear if required by other transportation regulations. |

**AERG: 131**

**DIT-RQ Details** Sodium Nitrite  
100 lbs/45.4 kg

**Special precautions for user** **Transport within users' premises:** Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available

**SECTION 15. REGULATORY INFORMATION**

**U.S. Federal regulations** TSCA 5(a)2 final significant new use rules: Sodium nitrite  
 TSCA 8(a) CDR Exempt/Partial exemption: Not determined  
 TSCA 12(b) one-time export: Sodium nitrite  
 United States inventory (TSCA 8b): All components are listed or exempted.  
 Clean Water Act (CWA) 311: Sodium nitrite

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** Listed

**Clean Air Act Section 602**  
 Class I Substances Not listed  
 Class II Substances Not listed

**DEA List I Chemicals (Precursor Chemicals)** Not listed

**DEA List II Chemicals (Essential Chemicals)** Not listed

**SARA 302/304** No products were found

**SARA 304 RQ** Not applicable

**SARA 311/312** Fire Hazard. Immediate (acute) health hazard

| NAME            | %        | FIRE HAZARD | SUDDEN RELEASE OF PRESSURE | REACTIVE | IMMEDIATE (ACUTE) HEALTH HAZARD | DELAYED (CHRONIC) HEALTH HAZARD |
|-----------------|----------|-------------|----------------------------|----------|---------------------------------|---------------------------------|
| Cobalt oxide    | 60 - 100 | No          | No                         | No       | Yes                             | No                              |
| Turpentine, oil | 10 - 30  | Yes         | No                         | No       | Yes                             | No                              |
| Sodium nitrite  | 0.1 - 1  | Yes         | No                         | No       | Yes                             | No                              |

**SARA 313**

|                                 | PRODUCT NAME   | CAS NUMBER |
|---------------------------------|----------------|------------|
| Form R - reporting requirements | Cobalt oxide   | 1307-96-6  |
|                                 | Sodium nitrite | 7632-00-0  |
| Supplier notification           | Cobalt oxide   | 1307-96-6  |
|                                 | Sodium nitrite | 7632-00-0  |

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

**SECTION 15. REGULATORY INFORMATION, CONTINUED**

**STATE REGULATIONS**

- Massachusetts** The following components are listed: Turpentine, oil; Sodium nitrite
- New York** The following components are listed: Sodium nitrite
- New Jersey** The following components are listed: Cobalt oxide; Turpentine, oil; Sodium nitrite
- Pennsylvania** The following components are listed: Cobalt oxide; Sodium nitrite
- California Prop. 65** **WARNING:** This product contains a chemical known to the State of California to cause cancer.

| INGREDIENT NAME | CANCER   | REPRODUCTIVE | NO SIGNIFICANT RISK LEVEL | MAXIMUM ACCEPTABLE DOSAGE LEVEL |
|-----------------|----------|--------------|---------------------------|---------------------------------|
| Cobalt oxide    | 60 - 100 | No           | No                        | No                              |

**SECTION 16. OTHER INFORMATION**

**Date of issue mm/dd/yyyy** 05/15/2015

**Version** 1

**Prepared by** KMK Regulatory Services Inc.

**Key to abbreviations** ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 UN = United Nations

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.