

SAFETY DATA SHEET

Creation Date 10-Mar-2010

Revision Date 19-Jan-2018

Revision Number 4



Signal Word

Danger

Hazard Statement

3. Composition/Information on Ingredients

| Component | CAS-No | Weight % |
|---------------------|-----------|----------|
| Cobalt(II) chloride | 7646-79-9 | >95 |

4. First-aid measures

| | |
|-----------------------|---|
| General Advice | Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. |
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required. |
| Inhalation | Remove to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required. |
| Ingestion | Do NOT induce vomiting. Call a physician or poison control center immediate () 1-800-455-6110 |

6. Accidental release measures

| | |
|---|---|
| Personal Precautions | Use personal protective equipment as required. Ensure adequate ventilation. Avoid dust formation. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas. |
| Environmental Precautions | Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained. |
| Methods for Containment and Clean Up | Sweep up and shovel into suitable containers for disposal. Avoid dust formation. |

7. Handling and storage

| | |
|-----------------|---|
| Handling | Wear personal protective equipment/face protection. Do not get in eyes, on skin, or on clothing. Avoid dust formation. Use only under a chemical fume hood. Do not breathe (dust, vapor, mist, gas). Do not ingest. If swallowed then seek immediate medical assistance. |
| Storage | Store in a cool, dry, well-ventilated area. Keep away from heat, fire, and oxidizing agents. Do not store in plastic bags or containers. Use appropriate labeling and safety data sheets. Store in a secure, locked container. Do not store in a confined space. Do not store in a room with a high humidity. Do not store in a room with a high temperature. Do not store in a room with a high concentration of dust. Do not store in a room with a high concentration of gas. Do not store in a room with a high concentration of vapor. Do not store in a room with a high concentration of mist. Do not store in a room with a high concentration of liquid. Do not store in a room with a high concentration of solid. Do not store in a room with a high concentration of powder. Do not store in a room with a high concentration of fiber. Do not store in a room with a high concentration of dust. Do not store in a room with a high concentration of gas. Do not store in a room with a high concentration of vapor. Do not store in a room with a high concentration of mist. Do not store in a room with a high concentration of liquid. Do not store in a room with a high concentration of solid. Do not store in a room with a high concentration of powder. Do not store in a room with a high concentration of fiber. |

| | |
|---|--------------------------|
| Lower | No data available |
| Vapor Pressure | 40 mmHg @ 770 °C |
| Vapor Density | Not applicable |
| Specific Gravity | No information available |
| Solubility | Soluble in water |
| Partition coefficient; n-octanol/water | No data available |
| Autoignition Temperature | No information available |
| Decomposition Temperature | No information available |
| Viscosity | Not applicable |
| Molecular Formula | Cl ₂ Co |
| Molecular Weight | 129.84 |

10. Stability and reactivity

| | |
|---|---|
| Reactive Hazard | None known, based on information available |
| Stability | Hygroscopic. |
| Conditions to Avoid | Incompatible products. Excess heat. Avoid dust formation. Exposure to moist air or water. |
| Incompatible Materials | Strong oxidizing agents |
| Hazardous Decomposition Products | Hydrogen chloride gas |
| Hazardous Polymerization | Hazardous polymerization does not occur. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Acute Toxicity

Product Information

Component Information

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|---|---|------------------------|----------------------------------|
| Cobalt(II) chloride | 586 mg/kg (Rat) | Not listed | Not listed |
| Toxicologically Synergistic Products | No inf1 Td(Cobalt(II) chloride) Tj ET Q | q .20807 0 0 .20831 Tj | 10sd() Tj0j 11111111d(1 Td(Coba |

Teratogenicity No information available.

STOT - single exposure Respiratory system
STOT - repeated exposure Heart Blood

Aspiration hazard No information available

Symptoms / effects,both acute and delayed 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

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15. Regulatory information

United States of America Inventory

| Component | CAS-No | TSCA | TSCA Inventory notification - Active/Inactive | TSCA - EPA Regulatory Flags |
|---------------------|-----------|------|---|-----------------------------|
| Cobalt(II) chloride | 7646-79-9 | X | ACTIVE | - |

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Australia (AICS), China (IECSC), Korea (ECL).

| Component | CAS-No | DSL | NDSL | EINECS | PICCS | ENCS | AICS | IECSC | KECL |
|---------------------|-----------|-----|------|-----------|-------|------|------|-------|----------|
| Cobalt(II) chloride | 7646-79-9 | X | - | 231-589-4 | X | X | X | X | KE-06095 |

U.S. Federal Regulations

SARA 313

| Component | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---------------------|-----------|----------|-------------------------------|
| Cobalt(II) chloride | 7646-79-9 | >95 | 0.1 |

SARA 311/312 Hazard Categories See section 2 for more information

CWA (Clean Water Act) Not applicable

Clean Air Act

| Component | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---------------------|-----------|-------------------------|-------------------------|
| Cobalt(II) chloride | X | | - |

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Component | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------------|---------------|------------|--------------|----------|--------------|
| Cobalt(II) chloride | - | X | X | X | - |

U.S. Department of Transportation
Report

16. Other information

| | |
|-------------------------|---|
| Prepared By | Regulatory Affairs Thermo Fisher Scientific Email: EMSDS.RA@thermofisher.com |
| Creation Date | 10-Mar-2010 |
| Revision Date | 19-Jan-2018 |
| Print Date | 19-Jan-2018 |
| Revision Summary | This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). |

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS