

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

Issue date 10/31/2015

Reviewed on 10/31/2015

1 Identification

- **Product Identifier**
- **Trade name: Cobalt Sulfate, Heptahydrate**
- **CAS Number:**
10026-24-1
- **Relevant identified uses of the substance or mixture and uses advised against:**
- **Product Description** PC21 Laboratory chemicals
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
NuGeneration Technologies, LLC (dba NuGenTec)
1155 Park Avenue, Emeryville, CA 94608
salesteam@nugentec.com www.nugentec.com
1-888-996-8436 or 1-707-820-4080 for product information
- **Emergency telephone number:**
PERS Emergency Response: Domestic and Canada - 1-800-633-8253, International 1-801-629-0667

2 Hazard(s) Identification

- **Classification of the substance or mixture:**



GHS08 Health hazard

- Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Carc. 1B H350 May cause cancer.
 Repr. 1B H360 May damage fertility or the unborn child.



GHS09 Environment

- Aquatic Acute 1 H400 Very toxic to aquatic life.
 Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

- Acute Tox. 4 H302 Harmful if swallowed.

- **Label elements:**
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07



GHS08



GHS09

- **Signal word: Danger**

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· **Hazard statements:**

Harmful if swallowed.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 May cause cancer.
 May damage fertility or the unborn child.
 Very toxic to aquatic life.
 Very toxic to aquatic life with long lasting effects.

· **Precautionary statements:**

[In case of inadequate ventilation] wear respiratory protection.
 Avoid breathing dust/fume/gas/mist/vapors/spray.
 Wear protective gloves/protective clothing/eye protection/face protection.
 Avoid release to the environment.
 Wash thoroughly after handling.
 Do not eat, drink or smoke when using this product.
 Obtain special instructions before use.
 Do not handle until all safety precautions have been read and understood.
 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
 If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
 IF exposed or concerned: Get medical advice/attention.
 Rinse mouth.
 Collect spillage.
 Store locked up.
 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Classification system:**

· **NFPA ratings (scale 0 - 4)**



· **HMIS-ratings (scale 0 - 4)**



· **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization:** Substance
- **CAS No. Description**
 10026-24-1 Proprietary Cobalt Salt

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4 First-Aid Measures

- **Description of first aid measures:**
- **General information:**
Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.
- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *Immediately call a doctor.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:**
No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed:**
No further relevant information available.

5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:** *No further relevant information available.*
- **Advice for firefighters:**
- **Protective equipment:**
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures:** *Not required.*
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
*Dispose contaminated material as waste according to section 13.
Dispose of the collected material according to regulations.*
- **Reference to other sections:**
*See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.*

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
*Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.*

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Prevent formation of dust.

- **Information about protection against explosions and fires:**
Keep protective respiratory device available.
- **Conditions for safe storage, including any incompatibilities:**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**
- **Components with occupational exposure limits:**
- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing and wash before reuse.
Wash hands before breaks and at the end of work.
Store protective clothing separately.
- **Breathing equipment:** Not required.
- **Protection of hands:**



Protective gloves

- **Material of gloves:**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:**



Tightly sealed goggles

9 Physical and Chemical Properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
Form: Crystalline

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- **Color:** Red
- **Odor:** Odorless
- **Odor threshold:** Not determined.
- **pH-value (100 g/l) @ 20 °C (68 °F):** 4
- **Change in condition**
 - **Melting point/Melting range:** 98 °C (208 °F)
 - **Boiling point/Boiling range:** Not determined.
- **Flash point:** None
- **Flammability (solid, gaseous):** Product is not flammable.
- **Ignition temperature:** Not determined
- **Decomposition temperature:** Not determined.
- **Auto igniting:** Not determined.
- **Danger of explosion:** Product does not present an explosion hazard.
- **Explosion limits:**
 - **Lower:** Not determined.
 - **Upper:** Not determined.
- **Vapor pressure:** Not applicable.
- **Density:**
 - **Relative density:** Not determined.
 - **Vapor density:** Not applicable.
 - **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with:**
 - **Water:** Soluble.
- **Partition coefficient (n-octanol/water):** Not determined.
- **Viscosity:**
 - **Dynamic:** Not applicable.
 - **Kinematic:** Not applicable.
- **Other information:** No further relevant information available.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

Oral	LD50	582 mg/kg (rat)
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- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** No irritating effect.
- **Sensitization:** Sensitization possible through inhalation.
- **Additional toxicological information:**

- **Carcinogenic categories:**

- **IARC (International Agency for Research on Cancer):**

10026-24-1	Proprietary Cobalt Salt	2B
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- **NTP (National Toxicology Program):** Substance is not listed.
- **OSHA-Ca (Occupational Safety & Health Administration):** Substance is not listed.

12 Ecological Information

- **Toxicity:**
- **Aquatic toxicity:**
Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **Results of PBT and vPvB assessment:**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects:** No further relevant information available.

13 Disposal Considerations

- **Waste treatment methods:**
- **Recommendation:**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Observe all federal, state and local environmental regulations when disposing of this material.

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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agent:** Water, if necessary with cleansing agents.

14 Transport Information

- **UN-Number:** Non-Regulated Material
- **DOT** UN3077
- **ADR, IMDG, IATA**
- **UN proper shipping name:** Non-Regulated Material
- **DOT** UN3077 Environmentally hazardous substances, solid, n.o.s. (Proprietary Cobalt Salt)
- **ADR** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Proprietary Cobalt Salt), MARINE POLLUTANT
- **IMDG** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Proprietary Cobalt Salt)
- **IATA**
- **Transport hazard class(es):**
- **DOT**
- **Class:** Non-Regulated Material
- **ADR, IMDG, IATA**
- 
- **Class:** 9 Miscellaneous dangerous substances and articles
- **Packing group:**
- **DOT** Non-Regulated Material
- **ADR, IMDG, IATA** III
- **Environmental hazards:**
- **Special marking (ADR):** Symbol (fish and tree)
- **Special marking (IATA):** Symbol (fish and tree)
- **Special precautions for user:** Warning: Miscellaneous dangerous substances and articles
- **EMS Number:** F-A,S-F
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:** Not applicable.
- **Transport/Additional information:**
- **ADR**
- **Excepted quantities (EQ):** Code: E1
Maximum net quantity per inner packaging: 30 g
Maximum net quantity per outer packaging: 1000 g

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- **UN "Model Regulation":** UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S. (PROPRIETARY COBALT SALT), 9, III

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **SARA (Superfund Amendments and Reauthorization):**
- **Section 355 (extremely hazardous substances):** Substance is not listed.
- **Section 313 (Specific toxic chemical listings):** Substance is listed.
- **TSCA (Toxic Substances Control Act):** Substance is not listed.
- **California Proposition 65:**
- **Chemicals known to cause cancer:** Substance is listed.
- **Chemicals known to cause reproductive toxicity for females:** Substance is not listed.
- **Chemicals known to cause reproductive toxicity for males:** Substance is not listed.
- **Chemicals known to cause developmental toxicity:** Substance is not listed.
- **Carcinogenic categories:**
- **EPA (Environmental Protection Agency):** Substance is not listed.
- **TLV (Threshold Limit Value established by ACGIH):** Substance is not listed.
- **NIOSH-Ca (National Institute for Occupational Safety and Health):** Substance is not listed.
- **GHS label elements**
The substance is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



GHS07 GHS08 GHS09

- **Signal word:** Danger
- **Hazard statements:**
Harmful if swallowed.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause cancer.
May damage fertility or the unborn child.
Very toxic to aquatic life.
Very toxic to aquatic life with long lasting effects.
- **Precautionary statements:**
[In case of inadequate ventilation] wear respiratory protection.
Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves/protective clothing/eye protection/face protection.
Avoid release to the environment.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

IF exposed or concerned: Get medical advice/attention.

Rinse mouth.

Collect spillage.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

- **National regulations:** Non-Regulated Material
- **State Right to Know:** None of the ingredients are listed
- **Information about limitation of use:**
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
- **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- **Date of preparation / last revision:** 10/31/2015 / 1

- **Abbreviations and acronyms:**

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity, Hazard Category 4

Resp. Sens. 1: Sensitisation - Respirat., Hazard Category 1

Carc. 1B: Carcinogenicity, Hazard Category 1B

Repr. 1B: Reproductive toxicity, Hazard Category 1B

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

- *** Data compared to the previous version altered.**

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