SAFETY DATA SHEET

Version: v1 Revision Date: 2024-01-15 Print Date: 2024-01-20

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

1.1 Product identifiers

| Product name | : | Cobalt |
|----------------|---|-------------------|
| Product Number | : | C104959 |
| Brand | : | aladdin |
| CAS-No. | : | 7440-48-4(powder) |

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

| Identified uses | : Laboratory chemi | icals,Manufacture of substances. |
|-----------------|--------------------|----------------------------------|
| | | |

1.3 Company

| Company | : ALADDIN SCIENTIFIC CORPORATION |
|----------------------|----------------------------------|
| Address | : 14078 Meridian Parkway, |
| Riverside, CA. 92518 | |
| Telephone | : +1 (833) 552-7181 |
| Fax | : no data available |
| | |

1.4 Emergency telephone number

| CHEMTREC®, Inside the USA | : 1-800-424-9300 |
|----------------------------|------------------|
| CHEMTREC®, Outside the USA | : |

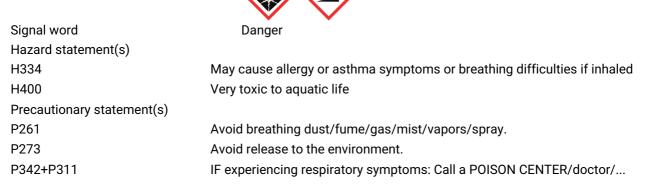
SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

2.2 GHS Label elements, including precautionary statements

Pictogram



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

SECTION 3: Composition/information on ingredients

3.1 Substances

| Synonyms | : Cobalt powder/cobalt flakes; superfine cobalt powder |
|------------------|--|
| Formula | : Co |
| Molecular weight | : 58.93 |
| CAS No. | : 7440-48-4(powder) |
| EC-NO. | : 231-158-0 |
| | |

| Component | Classification | Concentration |
|-----------|-------------------|---------------|
| Cobalt | | |
| | no data available | powder,99.5% |

powder,99.5% metals basis , 300mesh

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Consult a physician.Show this safety data sheet to the doctor in attendance.Move out of dangerous area. If inhaled

If breathed in, move person into fresh air.If not breathing, give artificial respiration.Consult a physician.

In case of skin contact

Wash off with soap and plenty of water.Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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 in section 11

4.3 Indication of any immediate medical attention and special treatment needed

no data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

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Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media no data available

5.2 Special hazards arising from the substance or mixture Cobalt/cobalt oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further 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 vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

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 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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Storage class (TRGS 510): Non Combustible Solids

7.3 Specific end use(s)

no data available

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses 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 gloves 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

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges.Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure

no data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| a) Appearance b) Odour c) Odour Threshold d) pH e) Melting point/freezing point f) Initial boiling point and boiling range g) Flash point h) Evaporation rate | form: piece color: light gray no data available no data available no data available 1,493 - 1,495 °C (2,719 - 2,723 °F) 2,900 °C (5,252 °F) - lit. not applicable no data available |
|--|--|
| i) Flammability (solid, gas) j) Upper/lower flammability or explosive limits k) Vapour pressure l) Vapour density m) Relative density n) Water solubility | no data available no data available no data available no data available 8.9 g/mL at 25 °C (77 °F) no data available |

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- o) Partition coefficient: n-octanol/water log Pow: 5
- p) Auto-ignition temperature no data available
- q) Decomposition temperature no data available

no data available

- r) Viscosity
- s) Explosive properties N no data available
- t) Oxidizing properties N no data available

9.2 Other safety information

no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

no data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

no data available

10.4 Conditions to avoid

Air

10.5 Incompatible materials

Oxidizing agents, Mineral acidsAcetylene, Hydrazinium nitrate, Strong oxidizing agents, Material readily reacts with acids generating flammable and/or explosive hydrogen gas.

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Skin - reconstructed human epidermis (RhE) Result: No skin irritation - 15 min (OECD Test Guideline 439)

Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity

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no data available

Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.IARC: 2B - Group 2B: Possibly carcinogenic to humans (Cobalt) 2A - Group 2A: Probably carcinogenic to humans (Cobalt) 2B - Group 2B: Possibly carcinogenic to humans (Cobalt) 12B - Group 2B: Possibly carcinogenic to humans (Cobalt) 2A - Group 2B: Possibly carcinogenic to humans (Cobalt) 2A - Group 2B: Possibly carcinogenic to humans (Cobalt) 2B - Group 2B: Possibly carcinogenic to humans (Cobalt) 12B - Group 2B: Possibly carcinogenic to humans (Cobalt) 12B - Group 2B: Possibly carcinogenic to humans (Cobalt) 12B - Group 2B: Possibly carcinogenic to humans (Cobalt) 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 Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard no data available Additional Information no data available

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish LC50 - Danio rerio (zebra fish) - > 100 mg/l - 96.0 h

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

no data available

12.6 Other adverse effects

no data available

SECTION 13:



13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.Contact a licensed professional waste disposal service to dispose of this material.Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Contaminated packaging Dispose of as unused product.

SECTION 14: Transport information

DOT (US)

| | UN number: no data available | Packing group: no data available | Class: no data available | | |
|----|---|----------------------------------|-----------------------------------|--|--|
| | Proper shipping name: Not dangerous | Reportable Quantity(RQ): no data | Poison Inhalation Hazard: no data | | |
| | goods | available | available | | |
| | Environmental Hazards: no data availab | ble | | | |
| II | IMDG | | | | |
| | UN number: no data available | Packing group: no data available | EMS-No: no data available | | |
| | Proper shipping name: Not dangerous goods | | | | |
| I/ | IATA | | | | |
| | UN number: no data available | Packing group: no data available | Class: no data available | | |
| | Proper shipping name: Not dangerous goods | | | | |
| | | | | | |

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

SECTION 16: Other information

| Prepared By | Regulatory Affairs ALADDIN SCIENTIFIC CORPORATION Email: QualityAssurance@aladdinsci.com |
|------------------|--|
| Creation Date | 10-Sep-2020 |
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| Revision Summary | SDS sections updated v1 |
| | |



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