



Safety Data Sheet

Section 1. Identification of the substance/mixture and of the company/undertaking

Product identifier:

Product name: Cobalt(II)acetate,4-hydrate
SDS No. : 1736E-3

Recommended use of the chemical and restrictions on use

Research and Development

Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.
Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN
Division: Chemical Safety Management Department
Telephone number: +81-6-6946-8061
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Section 2. Hazards identification

Classification of the substance or mixture

HEALTH HAZARDS

Acute toxicity (Oral): Category 4

Respiratory sensitization: Category 1A

Skin sensitization: Category 1A

Carcinogenicity: Category 1B

Reproductive toxicity: Category 1B

Specific target organ toxicity – single exposure: Category 2 (gastrointestinal tract, central nervous system)

Specific target organ toxicity – single exposure: Category 3 (Respiratory tract irritation)

Specific target organ toxicity – repeated exposure: Category 1 (blood system, cardiovascular system, thyroid, nervous system, respiratory system)

Specific target organ toxicity – repeated exposure: Category 2 (male genitalia)

(Note) GHS classification without description: Not classified/Classification not possible

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements

H302 Harmful if swallowed

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

H350 May cause cancer

H360 May damage fertility or the unborn child

H371 May cause damage to organs (gastrointestinal tract, central nervous system)

H335 May cause respiratory irritation

H372 Causes damage to organs through prolonged or repeated exposure (blood system, cardiovascular system, thyroid, nervous system, respiratory system)



H373 May cause damage to organs through prolonged or repeated exposure (male genitalia)

Precautionary statements

Prevention

- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P284 In case of inadequate ventilation wear respiratory protection.
- P271 Use only outdoors or in a well-ventilated area.
- P264 Wash hands thoroughly after handling.
- P272 Contaminated work clothing should not be allowed out of the workplace.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P270 Do not eat, drink or smoke when using this product.

Response

- P314 Get medical advice/attention if you feel unwell.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P312 Call a POISON CENTER/doctor if you feel unwell.
- P308 + P311 IF exposed or concerned: Call a POISON CENTER/doctor.
- P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P302 + P352 IF ON SKIN: Wash with plenty of water.
- P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
- P362 + P364 Take off contaminated clothing and wash it before reuse.
- P330 IF SWALLOWED: Rinse mouth.
- P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Storage

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
- P405 Store locked up.

Disposal

- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Specific danger/hazard

Health hazard

See "11. Toxicological Information".

Section 3. Composition/information on ingredients

Substance/mixture:

Substance

Ingredient name	Content (%)	CAS RN	ENCS	Chemical formula
Cobalt(II)acetate,4-hydrate	≥97	6147-53-1	2-693	Co(CH ₃ COO) ₂ ·4H ₂ O

Note : The figures shown above are not the specifications of the product.

Section 4. First aid measures

Descriptions of first aid measures

General measures

Get medical advice/attention if you feel unwell.

IF INHALED

IF INHALED: Remove person to fresh air and keep comfortable for breathing.



If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

IF INHALED: Call a POISON CENTER/doctor if you feel unwell.

IF ON SKIN

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

IF ON SKIN: Wash with plenty of water.

If skin irritation or rash occurs: Get medical advice/attention.

IF IN EYES

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.

IF SWALLOWED

Rinse mouth.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

Use appropriate extinguishing media suitable for surrounding facilities.

In case of fire, use water mist or loaded liquid, foam, inactive gases, dry powder, dry sand to extinguish.

*Fire Service Act Combustible solids or synthetic resins

Unsuitable extinguishing media

Extinguisher which discharge dry chemical fire extinguishing agents—Others (except for phosphates etc., hydrogen carbonates etc.)

*Ministerial Ordinance for Enforcement of the Fire Service Act (Appended Table 2)

Combustible solids or synthetic resins

Specific hazards arising from the substance or mixture

Fire may produce irritating, corrosive and/or toxic gases.

Runoff from fire control or dilution water may cause pollution.

See "10.Stability and Reactivity".

Advice for firefighters

Special extinguishing method

Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

Wear protective gloves/protective clothing/eye protection/face protection.

Firefighters should wear self-contained breathing apparatus with a full facepiece operated in the positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unauthorized personnel away.

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses, low areas or rivers. To be careful not discharged to the environment without being properly handled waste water contaminated.

**Methods and materials for containment and cleaning up**

Liquid: Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.

Solid: Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

Section 7. Handling and storage**Handling****Engineering measures**

(Measures to prevent operator exposure)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Measures to prevent fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Local ventilation/general ventilation)

Exhaust/ventilator should be available.

(Precautions)

Avoid contact with skin.

Avoid contact with eyes.

Advice on safe handling

Do not handle until all safety precautions have been read and understood.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/protective clothing/eye protection/face protection.

Wash hands and contaminated parts thoroughly after handling.

When using do not eat, drink or smoke.

Avoidance of contact

See "10.Stability and Reactivity".

Advice on general occupational hygiene

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Contaminated work clothing should not be allowed out of the workplace.

Take off contaminated clothing and wash it before reuse.

Storage**Conditions for safe storage**

Keep container tightly closed.

Store locked up. (P405)

Store in a cool, dry place. Do not store in direct sunlight.

Storage in accordance with local/national regulation.

Safe packaging material

Use closed unbreakable containers.

Section 8. Exposure controls/personal protection**Permissible concentration****Administrative Control Levels and Concentration standard value**

Not established

Occupational exposure limit values

The Japan Society for Occupational Health



0.05mg-Co/m³

Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

Personal protective equipment

Recommend to use protective equipment in conformity with the standards.

Use appropriate protective equipment in accordance with local/national regulation.

Respiratory protection

Wear respiratory protection (dust-proof mask/gas mask). Select chemical cartridge corresponding to type of gases when using a gas mask.

Hand protection

Wear impervious protective glove.

Eye/face protection

Wear eye/face protection. Wear safety goggles in cases gas is generated.

Skin and body protection

Wear protective clothing.

Section 9. Physical and Chemical Properties

Physical state: Crystals or crystalline powder

Color: Reddish violet

Odor: Characteristic odor

Melting point/Freezing point: 140°C

Boiling point, initial boiling point, or boiling range data is not available.

Flammability data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point: (Cobalt(II)acetate,4-hydrate)65°C

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Soluble

Solubility in solvent data is not available.

Partition coefficient n-octanol/water data is not available.

Vapor pressure data is not available.

Density and/or relative density: 1.7 g/cm³

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

Other information

Other information is not available.

Section 10. Stability and Reactivity

Reactivity

Not available.

Chemical stability

Deliquescent materials.

Possibility of hazardous reactions



Decomposes on heating. This produces irritating fumes. Reacts with strong oxidants. This generates fire and explosion hazard. (ICSC 1128)

Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon oxides, Cobalt compounds

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Product]

Category 4, Harmful if swallowed

[Data for components of the product]

[NITE-CHRIP]

rat LD50: 708 mg/kg (OECD TG 401) (source: NITE)

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Respiratory or skin sensitization

Respiratory sensitization

[Product]

Category 1A, May cause allergy or asthma symptoms or breathing difficulties if inhaled

[Data for components of the product]

[NITE-CHRIP]

Category 1A (source: NITE)

Skin sensitization

[Product]

Category 1A, May cause an allergic skin reaction

[Data for components of the product]

[NITE-CHRIP]

Category 1A (source: NITE)

Mutagenic effects data is not available.

Carcinogenicity

[Product]

Category 1B, May cause cancer

[Data for components of the product]

[NITE-CHRIP]

Category 1B (source: NITE)

[JSOH]

Group 2A: The agents which are probably or possibly carcinogenic to humans[Provisional]

Reproductive toxicity

[Product]

Category 1B, May damage fertility or the unborn child

[Data for components of the product]

[NITE-CHRIP]

Category 1B (source: NITE)



Specific target organ toxicity – single exposure

[Product]

Category 2, May cause damage to organs

Category 3, May cause respiratory irritation

[Data for components of the product]

[NITE-CHRIP]

Category 2 (gastrointestinal tract, central nervous system), Category 3 (Respiratory tract irritation) (source: NITE)

Specific target organ toxicity – repeated exposure

[Product]

Category 1, Causes damage to organs through prolonged or repeated exposure

Category 2, May cause damage to organs through prolonged or repeated exposure

[Data for components of the product]

[NITE-CHRIP]

Category 1 (blood system, cardiovascular system, thyroid, nervous system, respiratory system), Category 2 (male genitalia) (source: NITE)

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

–e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

Section 12. Ecological Information

Toxicity

Toxicity data is not available.

Water solubility

very good (25°C) (source: ICSC, 2013)

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.

Section 13. Disposal considerations

Waste from residues

Dispose of contents/container as industrial waste. Accordance with local/national regulation.

Section 14. Transport Information

UNRTDG

UN number : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

UN number : Not regulated

IATA (Dangerous Goods Regulations)



UN number : Not regulated
Environmental hazards
Marine pollutants (yes/no) : no
Environmentally hazardous substance/mixture (yes/no) : no

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture
U.S. Toxic Substances Control Act (TSCA) Inventory
Chemicals listed in TSCA Inventory
Applicable
Other regulatory information
Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

Section 16. Other information

References and sources for data
Globally Harmonized System of classification and labelling of chemicals, UN
Recommendations on the TRANSPORT OF DANGEROUS GOODS 23rd edit., 2023 UN
IMDG Code, 2024 Edition (Incorporating Amendment 42-24)
IATA Dangerous Goods Regulations (67th Edition) 2026
2024 EMERGENCY RESPONSE GUIDEBOOK (US DOT)
2026 TLVs and BEIs. (ACGIH)
JIS Z 7252 : 2019
JIS Z 7253 : 2019
Recommendation of occupational exposure limits (2024-2025) (JSOH)
Supplier's data/information
General Disclaimer
© KISHIDA CHEMICAL CO., LTD.
Unauthorized translation or modification is prohibited.
Please provide SDS to customers for selling or transferring.
All chemicals have unknown hazard. Handle the product with care.
This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.
The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.
The GHS classification data given here is based on current Data published in Japan (National Institute of Technology and Evaluation (NITE) Chemical Risk Information Platform (NITE-CHRIP), up to FY2024).