

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

**SECTION 1. IDENTIFICATION****Identification of the company:**

Clariant Corporation  
500 East Morehead Street  
Charlotte, NC, 28202  
Telephone No.: +1 704 331 7000

**Information of the substance/preparation:**

Product Stewardship, +1-704-331-7710  
e-mail: SDS.NORAM@clariant.com

**Emergency tel. number:** +1 800-424-9300 CHEMTREC

**Trade name:** HI Card, 6203-100  
**Material number:** 255079  
**Chemical family:** cobalt dichloride on cardboard  
**Primary product use:** Indicator for air humidity

**SECTION 2. HAZARDS IDENTIFICATION****GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)**

Respiratory sensitisation : Category 1  
Skin sensitisation : Category 1  
Germ cell mutagenicity : Category 2  
Carcinogenicity (Inhalation) : Category 1B  
Reproductive toxicity : Category 1B

**GHS label elements**

Hazard pictograms :



Signal word : Danger

Hazard statements : H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H341 Suspected of causing genetic defects.  
H350 May cause cancer by inhalation.  
H360F May damage fertility.

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

Precautionary statements

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**Prevention:**

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P272 Contaminated work clothing must not be allowed out of the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P285 In case of inadequate ventilation wear respiratory protection.

**Response:**

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

**Storage:**

P405 Store locked up.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

**Other hazards**

No additional hazards are known except those derived from the labelling.

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

Substance / Mixture : Mixture

Chemical nature : cobalt dichloride on cardboard

**Components**

Chemical name	CAS-No.	Concentration (% w/w)
Cobalt dichloride	7646-79-9	1 - 2.5

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

**SECTION 4. FIRST AID MEASURES**General advice : Take off all contaminated clothing immediately.  
Show this safety data sheet to the doctor in attendance.

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Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

---

- If inhaled : INHALATION: If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention. Get medical attention if cough and other symptoms develop. Remove to fresh air.
- In case of skin contact : Avoid contact with skin.  
Remove contaminated clothing and shoes.  
Wash off immediately with plenty of soap and plenty of water.  
Wash clothing before reuse.  
If skin irritation occurs: Get medical advice/ attention.
- In case of eye contact : Do not rub affected area.  
Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes.  
Obtain medical attention.
- If swallowed : Do NOT induce vomiting.  
Call your local Poison Control Center (In the U.S. call 1-800-222-1222).
- Most important symptoms and effects, both acute and delayed : The possible symptoms known are those derived from the labelling (see section 2).  
No additional symptoms are known.
- Notes to physician : Treat symptomatically.

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**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : The product itself does not burn.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No information available.
- Specific hazards during firefighting : In case of fire can be formed: breathable cobalt/cobalt oxide dust
- Further information : Wear full protective clothing and NIOSH/MSHA-approved positive pressure, self-contained breathing apparatus.
- Special protective equipment for firefighters : No special precautions required.

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**SECTION 6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.  
Avoid dust formation.  
Use personal protective equipment.

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

Avoid contact with skin, eyes and clothing.  
Wearing appropriate personal protective equipment, contain spill and collect into a suitable container.  
No special precautions required.

Environmental precautions : Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Sweep up or vacuum up spillage and collect in suitable container for disposal.

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## SECTION 7. HANDLING AND STORAGE

Technical measures : no data available

Advice on safe handling : Wash thoroughly after handling.  
Use only with adequate ventilation and proper protective eyewear, gloves, and clothing.  
Avoid contact with eyes.  
Avoid prolonged or repeated contact with skin.  
Minimize dust generation and accumulation.  
Do not grind the product.  
Avoid dust formation.  
Do not breathe vapours/dust.

Conditions for safe storage : Keep tightly closed in a dry and cool place.

Further information on storage conditions : Store in a dry place.

Materials to avoid : No materials to be especially mentioned.

Further information on storage stability : Stable under recommended storage conditions.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Cobalt dichloride	7646-79-9	TWA (Inhalable particulate matter)	0.02 mg/m <sup>3</sup> (Cobalt)	ACGIH

Engineering measures : none

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Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

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**Personal protective equipment**

- Respiratory protection : General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
- Hand protection  
Remarks : Wear protective gloves. Wash thoroughly after handling.
- Eye protection : Follow facility guidelines in the absence of dusts.
- Skin and body protection : Wear protective clothing, including long sleeves and gloves, to prevent skin contact.

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**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

- Appearance : Plates
- Colour : blue to pink
- Odour : none
- pH : 5 - 7  
Concentration: 2.5 %  
Information refers to the main component.
- Melting point : Not applicable
- Boiling point : not determined (for a component of this mixture)
- Flash point : Not applicable
- Flammability (solid, gas) : not determined
- Upper explosion limit / upper flammability limit : Not applicable
- Lower explosion limit / Lower : Not applicable

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Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

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flammability limit

Vapour pressure : Not applicable

Relative vapour density : Not applicable

Density : no data available

Solubility(ies)

Water solubility : partly soluble, max. 2,5% CoCl<sub>2</sub> can be leached out.

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : Not applicable

Decomposition temperature : no data available

Viscosity

Viscosity, kinematic : Not applicable

Metal corrosion rate : Not applicable

Particle size : no data available

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**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : Stable

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : None known.

Conditions to avoid : Exposure to moisture (hygroscopic).

Incompatible materials : Water

Hazardous decomposition products : No decomposition if stored and applied as directed.

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**SECTION 11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

Eye contact

Skin contact

Ingestion

**Acute toxicity****Product:**

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Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

---

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg  
Method: Calculation method

Acute inhalation toxicity : Remarks: no data available

Acute dermal toxicity : Remarks: no data available

**Components:****Cobalt dichloride:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

**Skin corrosion/irritation****Product:**

Remarks: no data available

**Serious eye damage/eye irritation****Product:**

Remarks: no data available

**Respiratory or skin sensitisation****Product:**

Remarks: no data available

**Components:****Cobalt dichloride:**

Result: May cause sensitisation by skin contact.

Result: The product is a respiratory sensitiser, sub-category 1A.

**Germ cell mutagenicity****Components:****Cobalt dichloride:**

Germ cell mutagenicity - Assessment : Suspected of inducing heritable mutations in the germ cells of humans.

**Carcinogenicity****Components:****Cobalt dichloride:**

Carcinogenicity - Assessment : Possible human carcinogen

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

**IARC** Group 2B: Possibly carcinogenic to humans

Cobalt dichloride 7646-79-9

**OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.**NTP** Reasonably anticipated to be a human carcinogen

Cobalt dichloride 7646-79-9

**Reproductive toxicity****Components:****Cobalt dichloride:**

Reproductive toxicity - Assessment : Clear evidence of adverse effects on sexual function and fertility, based on animal experiments.

**Experience with human exposure****Product:**

General Information : The possible symptoms known are those derived from the labelling (see section 2).

**Further information****Product:**Remarks: No data is available on the product itself.  
Handle in accordance with good industrial hygiene and safety practice.

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**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity****Product:**Toxicity to fish :  
Remarks: no data available

M-Factor (Acute aquatic toxicity) : 10

**Components:****Cobalt dichloride:****Ecotoxicology Assessment**

Acute aquatic toxicity : Very toxic to aquatic life.



HI Card, 6203-100

Page 9

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

Chronic aquatic toxicity : Very toxic to aquatic life with long lasting effects.

**Persistence and degradability****Product:**

Biodegradability : Remarks: no data available

**Bioaccumulative potential****Product:**

Bioaccumulation : Remarks: no data available

**Mobility in soil****Product:**

Distribution among environmental compartments : Remarks: no data available

**Other adverse effects****Product:**

Additional ecological information : obviously hazardous to water

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**SECTION 13. DISPOSAL CONSIDERATIONS****Disposal methods**

RCRA - Resource Conservation and Recovery Act

Authorization Act

Waste Code

: This product, if discarded as sold, is not a Federal RCRA hazardous waste.  
: NONE

Waste from residues

: This product, if discarded as sold, is not a Federal RCRA hazardous waste. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

Contaminated packaging

: Dispose of as unused product.

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**SECTION 14. TRANSPORT INFORMATION**

DOT not restricted

**IATA**

UN/ID number: UN 3077  
Proper shipping name: Environmentally hazardous substance, solid, n.o.s.  
Hazard inducer(s): Cobalt dichloride

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

Primary risk: 9  
Packing group: III  
Remarks: Shipment permitted

**IMDG**

UN no.: UN 3077  
Proper shipping name: Environmentally hazardous substance, solid, n.o.s.  
Hazard inducer(s): Cobalt dichloride

Primary risk: 9  
Packing group: III  
Marine pollutant: Marine Pollutant  
EmS: F-A S-F

**Further information:**

Non-dangerous good of class 9 for packagings &lt;= 5 L / 5 kg

**SECTION 15. REGULATORY INFORMATION****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

**SARA 304 Extremely Hazardous Substances Reportable Quantity**

This material does not contain any components with a section 304 EHS RQ.

**SARA 302 Extremely Hazardous Substances Threshold Planning Quantity**

This material does not contain any components with a section 302 EHS TPQ.

**SARA 311/312 Hazards** : Respiratory or skin sensitisation  
Germ cell mutagenicity  
Carcinogenicity  
Reproductive toxicity

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:

Cobalt dichloride 7646-79-9 >= 1 - < 5 %

**Clean Air Act**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

Cobalt dichloride 7646-79-9 >= 1 - < 5 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

**Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

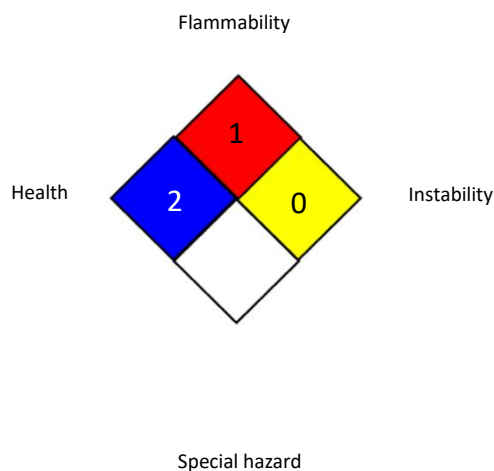
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

**The components of this product are reported in the following inventories:**

TSCA : All substances listed as active on the TSCA inventory

**SECTION 16. OTHER INFORMATION****Further information****NFPA 704:****Full text of other abbreviations**

ACGIH : USA. ACGIH Threshold Limit Values (TLV)  
ACGIH / TWA : 8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous

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Substance key: SC0000100257

Revision Date: 05/03/2022

Version : 2 - 5 / USA

Date of printing :11/03/2023

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Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

For additional information, contact Product Stewardship.

Revision Date : 05/03/2022

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# SAFETY DATA SHEET



**HI Card, 6203-100**

Page 13

---

Substance key: SC0000100257

Revision Date: 05/03/2022

---

Version : 2 - 5 / USA

Date of printing :11/03/2023

---