



INTATRADE
MATERIAL SAFETY DATA SHEET
according to 1907/2006/EC, Article 31

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1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Product name: **HEXAAMMINECOBALT(III) CHLORIDE**
Product code: EO03943
Company: INTATRADE Chemicals GmbH
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2. HAZARDS IDENTIFICATION

Hazard designation: Xn Harmful
Information pertaining to particular dangers for man and environment: R 40 Limited evidence of a carcinogenic effect.
R 43 May cause sensitisation by skin contact.
GHS label elements:

**Warning**

H351 - Suspected of causing cancer.

**Warning**

Prevention: H317 - May cause an allergic skin reaction.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response: P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P321 Specific treatment.
Storage: P405 Store locked up.
Disposal: P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Designation: Hexaamminecobalt trichloride
CAS-No.: 10534-89-1
EC-No.: 234-103-9

4. FIRST AID MEASURES

After inhalation Supply fresh air and call for doctor for safety reasons.
If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.
After skin contact Instantly wash with water and soap and rinse thoroughly.
Seek immediate medical advice.

After eye contact	Rinse opened eye for several minutes under running water. Then consult doctor.
After swallowing	Seek immediate medical advice.

5. FIRE FIGHTING MEASURES

Suitable extinguishing agents:	Use fire fighting measures that suit the environment.
Protective equipment:	Wear self-contained breathing apparatus. Wear full protective suit.

6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions:	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
Measures for environmental protection:	Do not allow material to be released to the environment without proper governmental permits.
Measures for cleaning/collecting:	Dispose of contaminated material as waste according to item 13.
Additional information:	See Section 7 for information on safe handling See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

7. HANDLING AND STORAGE

Handling	
Information for safe handling:	Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires:	No special measures required.
Storage	
Requirements to be met by storerooms and containers:	No special requirements.
Information about storage in one common storage facility:	Store away from oxidizing agents.
Further information about storage conditions:	Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems:	Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.
Components with critical values that require monitoring at the workplace:	Cobalt, elemental & inorganic compounds, as Co mg/m ³ ACGIH TLV 0.02; Confirmed animal carcinogen Austria Carcinogen Belgium TWA 0.05 Denmark TWA 0.05 Finland TWA 0.05 (skin) Germany Carcinogen Hungary TWA 0.1; 0.2-STEL Japan OEL 0.05; 2B-Carcinogen Korea TLV 0.02; Confirmed animal carcinogen Netherlands MAC-TGG 0.05 Norway TWA 0.05 Poland TWA 0.05; 0.2-STEL Russia 0.5-STEL Sweden NGV 0.05 Switzerland MAK-W 0.1; Carcinogen United Kingdom TWA 0.1

Personal protective equipment
General protective and hygienic
measures:

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work.

Breathing equipment:

Use breathing protection with high concentrations.

Eye protection:

Safety glasses, face protection

Body protection:

Protective work clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

Form: Powder
Colour: Orange
Smell: Odourless

Change in condition

Melting point/Melting range: Not determined
Boiling point/Boiling range: Not determined
Sublimation temperature/start: Not determined

Flash point: Not applicable
Ignition temperature: Not determined
Decomposition temperature: Not determined
Danger of explosion: Product is not explosive.
Critical values for explosion:
Lower: Not determined
Upper: Not determined
Steam pressure: Not determined
Density at 20°C: 1.71 g/cm³
Solubility in water: Soluble

10. STABILITY AND REACTIVITY

Thermal decomposition /
conditions to be avoided: No decomposition if used and stored according to specifications.
Materials to be avoided: Oxidizing agents
Dangerous reactions: No dangerous reactions known
Dangerous products of
decomposition: Nitrogen oxides (NO_x), Hydrogen chloride (HCl)

11. TOXICOLOGICAL INFORMATION

Acute toxicity:
Primary irritant effect:
on the skin: Irritant for skin and mucous membranes.
on the eye: Irritant effect.
Sensitization: Sensitization possible by skin contact.
Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.
ACGIH A3: Animal carcinogen: Agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) not considered relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.
Sensitisation: May cause sensitisation by skin contact.

12. ECOLOGICAL INFORMATION

Additional ecological information

General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.
Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
Do not allow material to be released to the environment without proper governmental permits.

13. DISPOSAL CONSIDERATIONS

Product

Recommendation:

Consult state, local or national regulations for proper disposal.
Hand over to disposers of hazardous waste.
Must be specially treated under adherence to official regulations.

Uncleaned packagings

Recommendation:

Disposal must be made according to official regulations.

Recommended cleaning agent:

Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

Land transport ADR/RID and
GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: None

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information: Not dangerous according to the above specifications.

15. REGULATORY INFORMATION

Designation according to EC guidelines:

Code letter and hazard

designation of product:

Xn Harmful

Risk phrases:

40 Limited evidence of a carcinogenic effect.

43 May cause sensitisation by skin contact.

Safety phrases:

24 Avoid contact with skin.

37 Wear suitable gloves.

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.
For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

16. OTHER INFORMATION

Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Intatrade Chemicals GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.