



<a href="#">Cobalt(II) Chromate</a>		<a href="#">Pricing &gt;</a>
Linear Formula	CoCrO <sub>4</sub>	
Pubchem CID	61614	
MDL Number	MFCD00053962	
EC No.	236-651-4	
IUPAC Name	cobalt(2+); dioxido(dioxo)chromium	
Beilstein/Reaxys No.	N/A	
SMILES	[Co+2].[O-][Cr]([O-])(=O)=O	
Inchi Identifier	InChI=1S/Co.Cr.4O/q+2;;;;;2*-1	
Inchi Key	XTUHPOUJWWTMNC-UHFFFAOYSA-N	
Signal Word	Danger	
Hazard Statements	H350-H400-H410-H317	
Hazard Codes	T, N, Xi	
Precautionary Statements	P261-P280-P281-P363-P405-P501a	
Risk Codes	R43-R49-R50/23	
Safety Statements	N/A	
Transport Information	UN 3087 5.1(6.1)/PG III	
GHS Pictograms	<a href="#">GHS07 Exclamation Point</a>  <a href="#">GHS08 Health Hazard</a>  <a href="#">GHS09 Environment</a> 	

[Create Printable PDF](#)

## SAFETY DATA SHEET

Date Accessed: 05/20/2024

Date Revised: 01/15/2022

---

## SECTION 1. IDENTIFICATION

**Product Identifiers:** All applicable American Elements product codes for CAS #13455-25-9

**Relevant identified uses of the substance:**  
Scientific research and development

Supplier details:  
American Elements  
10884 Weyburn Ave.  
Los Angeles, CA 90024  
Tel: +1 310-208-0551  
Fax: +1 310-208-0351

Emergency telephone number:  
Domestic, North America +1 800-424-9300  
International +1 703-527-3887

---

## SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture  
Classification according to Regulation (EC) No 1272/2008  
GHS08 health hazard  
Carc. 1B H350i May cause cancer by inhalation.  
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  
Skin Sens. 1 H317 May cause an allergic skin reaction.  
Classification according to Directive 67/548/EEC or Directive 1999/45/EC  
T; Toxic  
R49: May cause cancer by inhalation.  
Xi; Sensitising  
R43: May cause sensitisation by skin contact.  
N; Dangerous for the environment  
R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Information concerning particular hazards for human and environment: Not applicable  
Other hazards that do not result in classification No information known.

2.2 Label elements  
Labelling according to Regulation (EC) No 1272/2008  
The substance is classified and labelled according to the CLP regulation.  
Hazard pictograms  
GHS07 GHS08 GHS09

Signal word Danger

Hazard statements

H317 May cause an allergic skin reaction.

H350i May cause cancer by inhalation.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P261 Avoid breathing

dust/fume/gas/mist/vapours/spray.

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

P281 Use personal protective equipment as required.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

---

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

3.1 Substances

CAS# Designation:

13455-25-9 Cobalt (II) chromate

Identification number(s):

EC number: 236-651-4

Index number: 024-017-00-8

---

## **SECTION 4. FIRST AID MEASURES**

4.1 Description of first aid measures

After inhalation

Supply fresh air. 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 medical treatment.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

---

## **SECTION 5. FIREFIGHTING MEASURES**

### **5.1 Extinguishing media**

Suitable extinguishing agents Product is not flammable. Use fire-fighting measures that suit the surrounding fire.

### **5.2 Special hazards arising from the substance or mixture**

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

If this product is involved in a fire, the following can be released:

Toxic metal oxide smoke

### **5.3 Advice for firefighters**

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

---

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

### **6.2 Environmental precautions: Do not allow material to be released to the environment without proper governmental permits.**

### **6.3 Methods and material for containment and cleaning up:**

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Prevention of secondary hazards:

Acts as an oxidizing agent on organic materials such as wood, paper and fats

Keep away from combustible material.

### **6.4 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 information on disposal.

---

## **SECTION 7. HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Keep containers tightly sealed.

Store in cool, dry place in tightly closed containers.

Ensure good ventilation/exhaustion at the workplace.  
Open and handle container with care.  
Information about protection against explosions and fires:

Substance/product can reduce the ignition temperature of flammable substances.

This substance is an oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility:

Store away from flammable substances.

Store away from reducing agents.

Do not store with organic materials.

Store away from metal powders.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

7.3 Specific end use(s) No further relevant information available.

---

## **SECTION 8. EXPOSURE CONTROLS/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.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Chromium (VI) compounds, as Cr  
mg/m<sup>3</sup>

ACGIH TLV 0.05; Confirmed human carcinogen

Belgium TWA 0.01 (insoluble)

0.05 (water soluble)

Germany MAK 0.1 (production)(water soluble)

0.5 (other applications)(water soluble)

Netherlands MAC-TGG 0.01 (water insoluble)

0.025 (water soluble)

0.05-STEL (water soluble)

Poland TWA 0.025; 0.05-STEL

Sweden TWA 0.02

United Kingdom TWA 0.05

USA PEL 0.005

Cobalt, elemental & inorganic compounds, as Co  
mg/m<sup>3</sup>  
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  
Ireland TWA 0.1  
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  
USA PEL 0.1 (dust and fume)  
Additional information: No data  
8.2 Exposure controls  
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.  
Store protective clothing separately.  
Maintain an ergonomically appropriate working  
environment.  
Breathing equipment: Use breathing protection with  
high concentrations.  
Protection of hands:  
Check protective gloves prior to each use for their  
proper condition.  
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.  
Material of gloves Impervious gloves  
Eye protection: Safety glasses  
Body protection: Protective work clothing.

---

## **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical  
properties  
General Information  
Appearance:  
Form: Powder

Colour: Brown  
Smell: Odourless  
Odour threshold: Not determined.  
pH-value: Not applicable.  
Change in condition  
Melting point/Melting range: Decomposes  
Boiling point/Boiling range: Not determined  
Sublimation temperature / start: Not determined  
Flash point: Not applicable  
Inflammability (solid, gaseous) Contact with combustible material may cause fire.  
Ignition temperature: Not determined  
Decomposition temperature: Not determined  
Self-inflammability: Not determined.  
Danger of explosion: Product is not explosive.  
Critical values for explosion:  
Lower: Not determined  
Upper: Not determined  
Steam pressure: Not applicable.  
Density Not determined  
Relative density Not determined.  
Vapour density Not applicable.  
Evaporation rate Not applicable.  
Solubility in / Miscibility with Water: Insoluble  
Partition coefficient (n-octanol/water): Not determined.  
Viscosity:  
dynamic: Not applicable.  
kinematic: Not applicable.  
9.2 Other information No further relevant information available.

---

## **SECTION 10. STABILITY AND REACTIVITY**

10.1 Reactivity No information known.  
10.2 Chemical stability Stable under recommended storage conditions.  
Thermal decomposition / conditions to be avoided: No decomposition if used and stored according to specifications.  
10.3 Possibility of hazardous reactions  
Reacts with reducing agents  
Reacts with flammable substances  
10.4 Conditions to avoid No further relevant information available.  
10.5 Incompatible materials:  
Flammable substances  
Reducing agents  
Organic materials  
Metal powders  
10.6 Hazardous decomposition products: Toxic metal oxide smoke

---

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### 11.1 Information on toxicological effects

Acute toxicity: No effects known.

LD/LC50 values that are relevant for classification: No data

Skin irritation or corrosion:

Corrosive effect on skin and mucous membranes.

Irritant for skin and mucous membranes.

Eye irritation or corrosion:

Strong corrosive effect.

Irritant effect.

Sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: No effects known.

Carcinogenicity:

May cause cancer.

EPA-A: human carcinogen: sufficient evidence from epidemiologic studies to support a causal association between exposure and cancer.

IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.

ACGIH A1: Confirmed human carcinogen: Agent is carcinogenic to humans based on epidemiologic studies of, or convincing clinical evidence in, exposed humans.

NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

---

## **SECTION 12. ECOLOGICAL INFORMATION**

### 12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Ecotoxicological effects:



Remark: Very toxic for fish  
Additional ecological information:  
General notes:  
Do not allow product to reach ground water, water bodies or sewage system.  
Do not allow material to be released to the environment without proper governmental permits.  
Water hazard class 2 (Self-assessment): hazardous for water.  
Danger to drinking water if even small quantities leak into soil.  
Also poisonous for fish and plankton in water bodies.  
May cause long lasting harmful effects to aquatic life.  
Avoid transfer into the environment.  
Very toxic for aquatic organisms  
12.5 Results of PBT and vPvB assessment  
PBT: Not applicable.  
vPvB: Not applicable.  
12.6 Other adverse effects No further relevant information available.  
SECTION 13: Disposal considerations

---

## **SECTION 13. DISPOSAL CONSIDERATIONS**

Recommendation  
Hand over to disposers of hazardous waste.  
Must be specially treated under adherence to official regulations.  
Consult state, local or national regulations for proper disposal.  
Uncleaned packagings:  
Recommendation: Disposal must be made according to official regulations.

---

## **SECTION 14. TRANSPORT INFORMATION**

UN-Number  
ADR, IMDG, IATA UN3087  
14.2 UN proper shipping name  
ADR 3087 OXIDIZING SOLID, TOXIC, N.O.S. (Cobalt (II) chromate)  
IMDG, IATA OXIDIZING SOLID, TOXIC, N.O.S. (Cobalt (II) chromate)  
14.3 Transport hazard class(es)  
ADR  
Class 5.1 (OT2) Oxidising substances.  
Label 5.1+6.1  
IMDG, IATA  
Class 5.1 Oxidising substances.  
Label 5.1+6.1

Packing group  
ADR, IMDG, IATA III  
14.5 Environmental hazards: Environmentally  
hazardous substance, solid  
14.6 Special precautions for user Warning: Oxidising  
substances.  
Kemler Number: 56  
14.7 Transport in bulk according to Annex II of  
MARPOL73/78 and the IBC  
Code Not applicable.  
Transport/Additional information:  
ADR  
Excepted quantities (EQ): E1  
Limited quantities (LQ) 5 kg  
Transport category 3  
Tunnel restriction code E  
UN "Model Regulation": UN3087, OXIDIZING SOLID,  
TOXIC, N.O.S. (Cobalt (II) chromate), 5.1 (6.1), III

---

## **SECTION 15. REGULATORY INFORMATION**

15.1 Safety, health and environmental  
regulations/legislation specific for the substance or  
mixture  
Australian Inventory of Chemical Substances  
Substance is not listed.  
Standard for the Uniform Scheduling of Drugs and  
Poisons Substance is not listed.  
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 2 (Self-  
assessment): hazardous for water.  
Other regulations, limitations and prohibitive  
regulations  
ELINCS (European List of Notified Chemical  
Substances) Substance is not listed.  
Substance of Very High Concern (SVHC) according to  
the REACH Regulations (EC) No. 1907/2006.  
Substance is not listed.  
The conditions of restrictions according to Article 67  
and Annex XVII of the Regulation (EC) No 1907/2006  
(REACH) for the manufacturing, placing on  
the market and use must be observed.  
Substance is not listed.  
Annex XIV of the REACH Regulations (requiring  
Authorisation for use) Substance is not listed.  
15.2 Chemical safety assessment: A Chemical Safety  
Assessment has not been carried out.

---

## 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). 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. American Elements shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. COPYRIGHT 1997-2022 AMERICAN ELEMENTS. LICENSED GRANTED TO MAKE UNLIMITED PAPER COPIES FOR INTERNAL USE ONLY.

---