
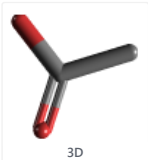







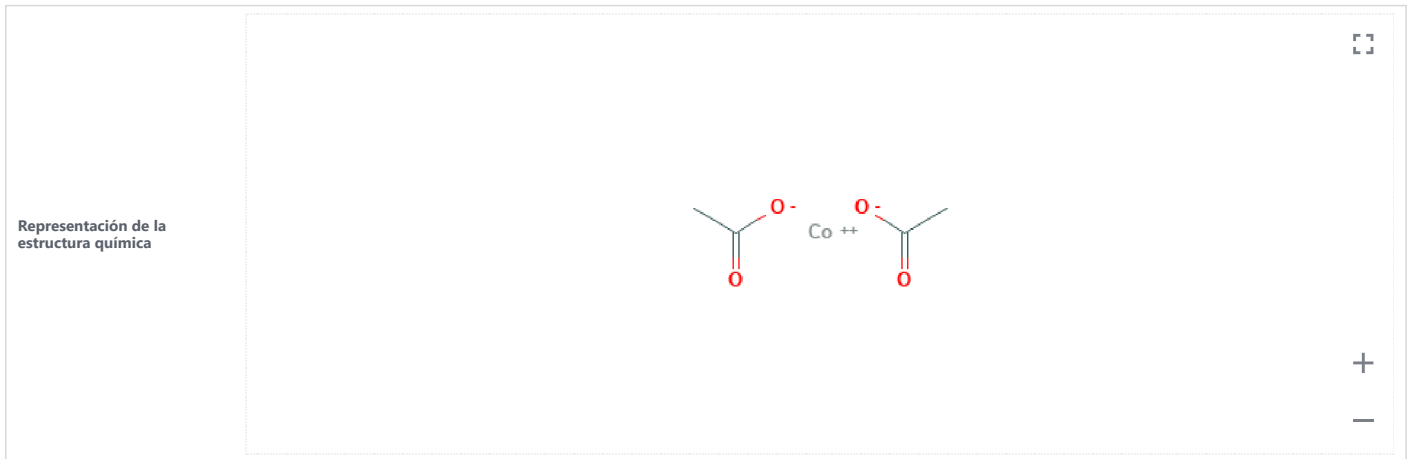
# Acetato de cobalto (II)

PubChem CID	6277
Estructura	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>2D</p> </div> <div style="text-align: center;">  <p>3D</p> </div> </div> <p style="text-align: center;"><a href="#">Encuentra estructuras similares</a></p>
Seguridad química	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  <p>Irritant</p> </div> <div style="text-align: center;">  <p>Health Hazard</p> </div> <div style="text-align: center;">  <p>Environmental Hazard</p> </div> </div> <p style="text-align: center;"><a href="#">Hoja de datos del resumen de seguridad química de laboratorio (LCSS)</a></p>
Fórmula molecular	<chem>Co(C2H3O2)2.4HOHOCOC(C2H3O2)2O</chem> C <sub>4</sub> H <sub>6</sub> CoO <sub>4</sub>
Sinónimos	<p>Acetato de cobalto          Acetato de cobalto (II)          71-48-7          Diacetato de cobalto          Diacetato cobaltoso</p> <p><a href="#">Más...</a></p>
Peso molecular	177,02 g / mol
Compuesto original	<div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <a href="#">CID 176 (ácido acético)</a> </div> </div>
Compuestos componentes	<div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;">  </div> <div> <a href="#">CID 176 (ácido acético)</a> </div> </div> <div style="display: flex; align-items: center;"> <div style="text-align: center; margin-right: 10px;"> <p>-</p> </div> <div> <a href="#">CID 104730 (Cobalto)</a> </div> </div> </div>
Fecha s	<p>Modificar    Crear</p> <p>2021-01-23    2005-07-19</p>
<p>El acetato de cobalto (II) es una sal de <a href="#">cobalto</a> en la que el <a href="#">cobalto</a> metálico está en el estado de oxidación +2 y el contraión es el <a href="#">acetato</a> . Es una sal de <a href="#">cobalto</a> y una sal de acetato.</p> <p><a href="#">▶ CHEBI</a></p> <p>El acetato de cobalto es un sólido cristalino rojo violeta. Olor parecido al <a href="#">vinagre</a> . (USCG, 1999)</p> <p><a href="#">▶ Químicos CAMEO</a></p>	

## 1 Estructuras



### 1.1 Estructura 2D



► PubChem

### 1.2 conformador 3D



Conformador 3D del padre

► PubChem

## 2 Names and Identifiers

### 2.1 Computed Descriptors

#### 2.1.1 IUPAC Name

cobalt(2+);diacetate

*Computed by LexiChem 2.6.6 (PubChem release 2019.06.18)*

[▶ PubChem](#)

#### 2.1.2 InChI

InChI=1S/2C2H4O2.Co/c2\*1-2(3)4;/h2\*1H3,(H,3,4);/q;+2/p-2

*Computed by InChI 1.0.5 (PubChem release 2019.06.18)*

[▶ PubChem](#)

#### 2.1.3 InChI Key

QAHREYKOYSIQPH-UHFFFAOYSA-L

*Computed by InChI 1.0.5 (PubChem release 2019.06.18)*

[▶ PubChem](#)

#### 2.1.4 Canonical SMILES

CC(=O)[O-].CC(=O)[O-].[Co+2]

*Computed by OEChem 2.1.5 (PubChem release 2019.06.18)*

[▶ PubChem](#)

## 2.2 Molecular Formula

Co(C2H3O2)2.4HOH

[▶ CAMEO Chemicals](#)

Co(C2H3O2)2

[▶ Wikipedia](#)

C4H6CoO4

*Computed by PubChem 2.1 (PubChem release 2019.06.18)*

[▶ PubChem](#)

## 2.3 Other Identifiers

### 2.3.1 CAS

71-48-7

[▶ ChemIDplus](#); [EPA Chemicals under the TSCA](#); [EPA DSSTox](#); [European Chemicals Agency \(ECHA\)](#); [Hazardous Substances Data Bank \(HSDB\)](#); [The National Institute for Occupational Safety and Health \(NIOSH\)](#)

5931-89-5

[▶ ChemIDplus](#)

### 2.3.2 Deprecated CAS

33327-32-1, 68279-06-1, 73005-84-2, 256431-41-1

[▶ ChemIDplus](#)

10029-36-4, 12769-25-4, 17410-09-2, 51140-33-1

[▶ ChemIDplus](#)

### 2.3.3 European Community (EC) Number

200-755-8

▶ [European Chemicals Agency \(ECHA\)](#)

### 2.3.4 RTECS Number



AG3150000

▶ [The National Institute for Occupational Safety and Health \(NIOSH\)](#)

### 2.3.5 UNII



3XC4P44U7E

▶ [FDA/SPL Indexing Data](#)

### 2.3.6 DSSTox Substance ID



DTXSID6026373

▶ [EPA DSSTox](#)

### 2.3.7 Wikipedia



Cobalt(II) acetate

▶ [Wikipedia](#)

## 2.4 Synonyms



### 2.4.1 MeSH Entry Terms



cobalt(II) acetate

▶ [MeSH](#)

### 2.4.2 Depositor-Supplied Synonyms



Cobalt acetate	HSDB 997	Cobalt(II)acetateanhydrous	CAS-71-48-7
Cobalt(II) acetate	EINECS 200-755-8	DSSTox_CID_6373	KS-00001150
71-48-7	NSC 78410	EC 200-755-8	NCGC00257978-01
Cobalt diacetate	Acetic acid, cobalt(2+) salt (2:1)	Cobalt(II)acetate,anhydrous	K211
Cobaltous diacetate	3XC4P44U7E	DSSTox_RID_78107	LS-11481
Cobalt(2+) acetate	MFCD00008689	DSSTox_GSID_26373	SC-46842
COBALTOUS ACETATE	Acetic acid, cobalt salt	SCHEMBL54008	SY256925
Bis(acetato)cobalt	cobalt-acetate	DTXSID6026373	DB-055533
Cobalt di(acetate)	Acetic acid, cobalt salt (1:?)	CHEBI:85138	Cobalt acetate, 99.99% trace metals basis
Acetic acid, cobalt(2+) salt	Cobalt (ii) acetate	CTK3J1042	FT-0623995
cobalt(2+) diacetate	cobalt(2+);diacetate	EINECS 227-676-1	Cobalt(II) acetate, trace metals grade, 99.99%
UNII-3XC4P44U7E	Cobalt acetate, 98%	Tox21_200424	Q421198
Cobalt acetate (Co(OAc)2)	C4H6CoO4	AKOS025295658	944155-28-6

▶ [PubChem](#)

## 3 Chemical and Physical Properties



### 3.1 Computed Properties



Property Name	Property Value	Reference
Molecular Weight	177.02 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Hydrogen Bond Donor Count	0	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Hydrogen Bond Acceptor Count	4	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Rotatable Bond Count	0	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Exact Mass	176.959802 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Monoisotopic Mass	176.959802 g/mol	Computed by PubChem 2.1 (PubChem release 2019.06.18)
Topological Polar Surface Area	80.3 Å <sup>2</sup>	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Heavy Atom Count	9	Computed by PubChem
Formal Charge	0	Computed by PubChem
Complexity	25.5	Computed by Cactvs 3.4.6.11 (PubChem release 2019.06.18)
Isotope Atom Count	0	Computed by PubChem
Defined Atom Stereocenter Count	0	Computed by PubChem
Undefined Atom Stereocenter Count	0	Computed by PubChem
Defined Bond Stereocenter Count	0	Computed by PubChem
Undefined Bond Stereocenter Count	0	Computed by PubChem
Covalently-Bonded Unit Count	3	Computed by PubChem
Compound Is Canonicalized	Yes	Computed by PubChem (release 2019.01.04)

► [PubChem](#)

## 3.2 Experimental Properties



### 3.2.1 Physical Description



Cobalt acetate is a red-violet crystalline solid. **Vinegar-like odor.** (USCG, 1999)

*U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Commandant Instruction 16465.12C. Washington, D.C.: U.S. Government Printing Office.*

► [CAMEO Chemicals](#)

PelletsLargeCrystals, Liquid

► [EPA Chemicals under the TSCA](#)

### 3.2.2 Color/Form



Light pink crystals

*O'Neil, M.J. (ed.). The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals. Cambridge, UK: Royal Society of Chemistry, 2013., p. 435*

► [Hazardous Substances Data Bank \(HSDB\)](#)

Pink crystals

*Larranaga, M.D., Lewis, R.J. Sr., Lewis, R.A.; Hawley's Condensed Chemical Dictionary 16th Edition. John Wiley & Sons, Inc. Hoboken, NJ 2016., p. 4-59*

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.3 Odor



Vinegar-like odor

*NOAA; CAMEO Chemicals. Database of Hazardous Materials. Cobalt Acetate (71-48-7). Natl Ocean Atmos Admin, Off Resp Rest; NOAA Ocean Serv. Available from, as of Jan 16, 2017: <http://cameochemicals.noaa.gov/>*

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.4 Melting Point



284 °F (USCG, 1999)

*U.S. Coast Guard. 1999. Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data. Commandant Instruction 16465.12C. Washington, D.C.: U.S. Government Printing Office.*

► [CAMEO Chemicals](#)

298 °C (decomposes)

*Alfa Aesar; Product Search Cobalt(II) Acetate (71-48-7). Available from, as of Jan 16, 2017: <http://www.alfa.com/>*

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.5 Solubility



Readily soluble in water

O'Neil, M.J. (ed.). *The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals*. Cambridge, UK: Royal Society of Chemistry, 2013., p. 435

► [Hazardous Substances Data Bank \(HSDB\)](#)

2.1 parts by wt (of the formula wt)/100 parts **methanol** by wt at 15 °C

Dean, J.A. *Handbook of Organic Chemistry*. New York, NY: McGraw-Hill Book Co., 1987., p. 2-12

► [Hazardous Substances Data Bank \(HSDB\)](#)

Soluble in alcohol and dilute acids

Alfa Aesar; *Product Search Cobalt(II) Acetate (71-48-7)*. Available from, as of Jan 16, 2017: <http://www.alfa.com/>

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.6 Density



1.71 at 68 °F (USCG, 1999)

U.S. Coast Guard. 1999. *Chemical Hazard Response Information System (CHRIS) - Hazardous Chemical Data*. Commandant Instruction 16465.12C. Washington, D.C.: U.S. Government Printing Office.

► [CAMEO Chemicals](#)

### 3.2.7 Stability/Shelf Life



Stable under recommended storage conditions.

Sigma-Aldrich; *Safety Data Sheet for Cobalt(II) acetate*. Product Number: 399973, Version 4.9 (Revision Date 04/15/2015). Available from, as of December 20, 2016: <http://www.sigmaaldrich.com/safety-center.html>

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.8 Decomposition



When heated to decomp it emits acrid smoke and irritating fumes.

Lewis, R.J. Sr. (ed) *Sax's Dangerous Properties of Industrial Materials*. 11th Edition. Wiley-Interscience, Wiley & Sons, Inc. Hoboken, NJ. 2004., p. 974

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.9 Relative Evaporation Rate



Evaporation of **cobaltous acetate tetrahydrate** at 20 °C is negligible

CDC; *International Chemical Safety Cards (ICSC) 2012*. Atlanta, GA: Centers for Disease Prevention & Control. National Institute for Occupational Safety & Health (NIOSH). Ed Info Div. Available from, as of Jan 16, 2017: <http://www.cdc.gov/niosh/ipcs/default.html>

► [Hazardous Substances Data Bank \(HSDB\)](#)

### 3.2.10 Other Experimental Properties



Intense red monoclinic, prismatic crystals; density 1.705; on heating becomes anhydrous by 140 °C; soluble in **water**, alcohols, dilute acids, and **pentyl acetate**; pH of 0.2 molar aqueous solution: 6.8 /Cobalt(2+) acetate tetrahydrate/

O'Neil, M.J. (ed.). *The Merck Index - An Encyclopedia of Chemicals, Drugs, and Biologicals*. Cambridge, UK: Royal Society of Chemistry, 2013., p. 435

► [Hazardous Substances Data Bank \(HSDB\)](#)

Reddish-violet, deliquescent crystals /Cobalt(2+) acetate tetrahydrate/

Larranaga, M.D., Lewis, R.J. Sr., Lewis, R.A.; *Hawley's Condensed Chemical Dictionary 16th Edition*. John Wiley & Sons, Inc. Hoboken, NJ 2016., p. 350

► [Hazardous Substances Data Bank \(HSDB\)](#)

Mol wt: 249.08; Index of refraction: 1.542 /Tetrahydrate/

Larranaga, M.D., Lewis, R.J. Sr., Lewis, R.A.; *Hawley's Condensed Chemical Dictionary 16th Edition*. John Wiley & Sons, Inc. Hoboken, NJ 2016., p. 4-59

► [Hazardous Substances Data Bank \(HSDB\)](#)

**Vinegar** like odor /Tetrahydrate/

*Farm Chemicals Handbook 87*. Willoughby, Ohio: Meister Publishing Co., 1987.

► [Hazardous Substances Data Bank \(HSDB\)](#)

Red, needle like crystals /Tetrahydrate/