

[Cobalt Trifluoromethanesulfonate](#)

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Linear Formula	Co(CF ₃ SO ₃) ₂
Pubchem CID	12984862
MDL Number	N/A
EC No.	N/A
IUPAC Name	cobalt(2+); trifluoromethanesulfonate
Beilstein/Reaxys No.	N/A
SMILES	[Co+2].FC(F)(F)S([O-])(=O)=O.FC(F)(F)S([O-])(=O)=O
Inchl Identifier	InChI=1S/2CHF3O3S.Co/c2*2-1(3,4)8(5,6)7;/h2*(H,5,6,7);/q;+2/p-2
Inchl Key	RDLMYNHWUFIVQE-UHFFFAOYSA-L

Signal Word	Danger
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Hazard Statements	H314-H318
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Hazard Codes	N/A
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Risk Codes	34, 36/37/38
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Safety Statements	25, 36/37/38
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Transport Information	UN 1759 8/ PG II
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WGK Germany	3
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SAFETY DATA SHEET

Date Accessed: 04/16/2024

Date Revised: 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifiers: All applicable American Elements product codes for CAS #58164-61-7

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

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910
(OSHA HCS)

Skin corrosion(Category 1B), H314

Serious eye damage(Category 1), H318

GHS Label elements, including precautionary
statements

Pictogram



Signal word: Danger.

Hazard statement(s):

H314

Causes severe skin burns and eye damage.

H318

Causes serious eye damage.

Precautionary statement(s):

P260

Do not breathe dust or mist.

P264

Wash skin thoroughly after handling.

P280

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

P301 + P330 + P331

IF SWALLOWED: Rinse mouth. Do NOT induce
vomiting.

P303 + P361 + P353

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

P304 + P340 + P310

IF INHALED: Remove victim to fresh air and keep at
rest in a position comfortable for breathing.

Immediately call a POISON CENTER or doctor/
physician.

P305 + P351 + P338 + P310

IF IN EYES: Rinse cautiously with water for several
minutes. Remove contact lenses, if present and easy
to do. Continue rinsing. Immediately call a POISON
CENTER or doctor/ physician.

P363

Wash contaminated clothing before reuse.

P405

Store locked up.

P501

Dispose of contents/ container to an approved waste

disposal plant.
Hazards not otherwise classified (HNOC) or not
covered by GHS-none

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name: Cobalt Trifluoromethanesulfonate
CAS #: 58164-61-7
Formula: (C2F6O6CoS2)

SECTION 4. FIRST AID MEASURES

ORAL EXPOSURE

If swallowed, wash out mouth with water provided
person is conscious. Call a physician immediately.

INHALATION EXPOSURE

If inhaled, remove to fresh air. If not breathing give
artificial respiration. If breathing is difficult, give
oxygen.

DERMAL EXPOSURE

In case of skin contact, flush with copious amounts of
water for at least 15 minutes. Remove contaminated
clothing and shoes.

Call a physician.

EYE EXPOSURE

In case of contact with eyes, flush with copious
amounts of water for at least 15 minutes. Assure
adequate flushing by separating the eyelids with
fingers. Call a physician.

SECTION 5. FIREFIGHTING MEASURES

FLASH POINT

N/A

AUTOIGNITION TEMP

N/A

FLAMMABILITY

N/A

EXTINGUISHING MEDIA

Suitable: Water spray.

FIREFIGHTING

Protective Equipment: Wear self-contained breathing
apparatus and protective clothing to prevent contact
with skin and eyes.

Specific Hazard(s): Emits toxic fumes under fire
conditions.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area.

PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

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

Ventilate area and wash spill site after material pickup is complete.

SECTION 7. HANDLING AND STORAGE

HANDLING

User Exposure: Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

STORAGE

Suitable: Keep tightly closed.

SPECIAL REQUIREMENTS

Hygroscopic.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits

For Cobalt Compound

-OSHA Permissible Exposure Limit (PEL):0.1 mg/m³ (TWA) Cobalt metal dust and fumes as Co.

-ACGIH Threshold Limit Value (TLV): inorganic cobalt compounds:0.02mg/m³ (TWA) as Co

A3: Animal Carcinogen

Thyroid effects on humans continue to be studied.

Experimental tumorigenic effects have been reported for cobalt compounds. Cobalt compounds have insufficient data to be classified as a human carcinogen.

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes: Wear chemical goggles

Skin: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State: Solid
Color: Pink
Property Value At Temperature or Pressure
Molecular Weight 357.07
pH N/A
BP/BP Range N/A
MP/MP Range N/A
Freezing Point N/A
Vapor Pressure N/A
Vapor Density N/A
Saturated Vapor Conc. N/A
SG/Density N/A
Bulk Density N/A
Odor Threshold N/A
Volatile% N/A
VOC Content N/A
Water Content N/A
Solvent Content N/A
Evaporation Rate N/A
Viscosity N/A
Surface Tension N/A
Partition Coefficient N/A
Decomposition Temp. N/A
Flash Point N/A
Explosion Limits N/A
Flammability N/A
Autoignition Temp N/A
Refractive Index N/A
Optical Rotation N/A
Miscellaneous Data N/A
Solubility very high
N/A = not available

SECTION 10. STABILITY AND REACTIVITY

Conditions to be observed:
Avoid strong heating
Substances to be avoided:

-Hazardous decomposition products:
In the event of a fire, see section 5 .

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity

Quantitative data on the toxicity of this product are not available.

Further toxicological information

If inhaled: irritation of the mucous membrane can occur, coughing and dyspnoea

After skin and eye contact: irritation can occur.

SECTION 12. ECOLOGICAL INFORMATION

Not Available

SECTION 13. DISPOSAL CONSIDERATIONS

APPROPRIATE METHOD OF DISPOSAL OF
SUBSTANCE OR PREPARATION

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

SECTION 14. TRANSPORT INFORMATION

UN 1759

Corrosive Solid, N.O.S.

(Cobalt Trifluoromethanesulfonate)

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PG II

SECTION 15. REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION

Symbol of Danger: C, XI

Indication of Danger: Corrosive.

R: 34

Risk Statements: Causes burns.

R: 36/37/38

Irritating to the eyes , respiratory system and skin.

Safety Phrases: S25 Avoid contact with eyes. S

36/37/38 Wear suitable protective clothing, gloves and eye/face protection.S45 In case of accident or if you feel unwell, seek medical advice immediately. (Show the label where possible)

WGK (water/Danger/Protection)

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.
