

# SAFETY DATA SHEET

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## SECTION 1. IDENTIFICATION

**Product Identifier:** (5N) 99.999% Cobalt Trifluoromethanesulfonate

**Product Code:** CO-CFS-05

**CAS Number:** 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:  
+1 800-424-9300

## 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

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

Substance Name: Cobalt Trifluoromethanesulfonate

CAS #: 58164-61-7

Formula: (C2F6O6CoS2)

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### **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.

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### **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.

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## 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.

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## 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.

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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Airborne Exposure Limits

For Cobalt Compound

-OSHA Permissible Exposure Limit (PEL):0.1 mg/m<sup>3</sup> (TWA) Cobalt metal dust and fumes as Co.

-ACGIH Threshold Limit Value (TLV): inorganic cobalt compounds:0.02mg/m<sup>3</sup> (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.

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## **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

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## **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 .

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## **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.

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## **SECTION 12. ECOLOGICAL INFORMATION**

Not Available

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## **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.

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## **SECTION 14. TRANSPORT INFORMATION**

UN 1759  
Corrosive Solid, N.O.S.  
(Cobalt Trifluoromethanesulfonate)  
8  
PG II

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## **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)

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## **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

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