Material Safety Data Sheet
Cobalt (II) Acetate Tetrahydrate, 97%

ACC# 00459

Section 1 - Chemical Product and Company Identification

MSDS Name: Cobalt (II) Acetate Tetrahydrate, 97%
Catalog Numbers: AC293060000, AC293060500, AC293062500
Synonyms: Acetic Acid Cobalt(2+) Salt; Cobaltous Acetate Tetrahydrate; Cobaltous Acetate Tetrahydrate.
Company Identification:
Acros Organics N.V.
One Reagent Lane
Fair Lawn, NJ 07410
For information in North America, call: 800-ACROS-01
For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>6147-53-1</td>
<td>COBALT(II) ACETATE TETRAHYDRATE, 97%</td>
<td>97</td>
<td>unlisted</td>
</tr>
</tbody>
</table>

Hazard Symbols: XN
Risk Phrases: 22 36 43

Section 3 - Hazards Identification

EMERGENCY OVERVIEW


**Target Organs:** Lungs.

**Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. Prolonged and/or repeated contact may cause irritation and/or dermatitis. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause allergic reaction. May cause flushing of the face and ears, mild hypotension, ringing in the ears, and nerve deafness. Ingestion of beer with cobalt additives may cause heart disorders.

**Inhalation:** Causes delayed lung injury. Causes respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract. May cause asthma and shortness of breath.

**Chronic:** Cobalt compounds may cause cancer based upon animal studies.

Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

https://fscimage.fishersci.com/msds/00459.htm
**Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.  
**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.  
**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. Get medical aid. Do NOT use mouth-to-mouth resuscitation.  
**Notes to Physician:** Treat symptomatically and supportively.

---

**Section 5 - Fire Fighting Measures**

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Non-combustible, substance itself does not burn but may decompose upon heating to produce irritating, corrosive and/or toxic fumes.  
**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.  
**Flash Point:** Not applicable.  
**Autoignition Temperature:** Not applicable.  
**Explosion Limits, Lower:** Not available.  
**Upper:** Not available.  
**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 0

---

**Section 6 - Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.  
**Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

---

**Section 7 - Handling and Storage**

**Handling:** Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Keep container tightly closed. Avoid ingestion and inhalation.  
**Storage:** Keep away from heat and flame. Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances.

---

**Section 8 - Exposure Controls, Personal Protection**

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.  
**Exposure Limits**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>COBALT(II) ACETATE TETRAHYDRATE, 97%</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
</tr>
</tbody>
</table>

**OSHA Vacated PELs:** COBALT(II) ACETATE TETRAHYDRATE, 97%: No OSHA Vacated PELs are listed for this
chemical.

**Personal Protective Equipment**

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

---

**Section 9 - Physical and Chemical Properties**

**Physical State:** Solid

**Appearance:** light amber

**Odor:** acetic odor

**pH:** Not available.

**Vapor Pressure:** Not applicable.

**Vapor Density:** Not applicable.

**Evaporation Rate:** Not available.

**Viscosity:** Not applicable.

**Boiling Point:** Not available.

**Freezing/Melting Point:** Not available.

**Decomposition Temperature:** Not available.

**Solubility:** Soluble in water.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** C4H6CoO4.4H2O

**Molecular Weight:** 249.0264

---

**Section 10 - Stability and Reactivity**

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials, dust generation, excess heat.

**Incompatibilities with Other Materials:** Strong oxidizers.

**Hazardous Decomposition Products:** Acrid smoke and fumes, oxides of cobalt.

**Hazardous Polymerization:** Has not been reported.

---

**Section 11 - Toxicological Information**

**RTECS#:**

**CAS# 6147-53-1: AG3325000**

**LD50/LC50:**

CAS# 6147-53-1:

Draize test, rabbit, eye: 500 mg/24H Mild;

Draize test, rabbit, skin: 500 mg/24H Moderate;

Oral, rat: LD50 = 708 mg/kg;

**Carcinogenicity:**

CAS# 6147-53-1:

**OSHA:** Possible select carcinogen (listed as Cobalt compounds).

**IARC:** Group 2B carcinogen (listed as Cobalt compounds).

**Epidemiology:** IARC Group 2B: Proven animal carcinogenic substance of poten tial relevance to humans. IARC
Group 2B: No data available on human carcinogenicity, however sufficient evidence of carcinogenicity in animals.  

**Teratogenicity:** Oncogenic transformation, hamster embryo: 200 umol/L  
**Reproductive Effects:** No information found.  
**Neurotoxicity:** No information found.  
**Mutagenicity:** No information found.  
**Other Studies:** See actual entry in RTECS for complete information.

### Section 12 - Ecological Information

No information available.

### Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.  

**RCRA P-Series:** None listed.  
**RCRA U-Series:** None listed.

### Section 14 - Transport Information

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shipping Name:</td>
<td>No information available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazard Class:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UN Number:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Packing Group:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Section 15 - Regulatory Information

#### US FEDERAL

**TSCA**  
CAS # 6147-53-1 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).  

**Health & Safety Reporting List**  
None of the chemicals are on the Health & Safety Reporting List.  

**Chemical Test Rules**  
None of the chemicals in this product are under a Chemical Test Rule.  

**Section 12b**  
None of the chemicals are listed under TSCA Section 12b.  

**TSCA Significant New Use Rule**  
None of the chemicals in this material have a SNUR under TSCA.  

**SARA**

**CERCLA Hazardous Substances and corresponding RQs**  
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
SARA Codes
CAS # 6147-53-1: acute, chronic.
Section 313
This material contains COBALT(II) ACETATE TETRAHYDRATE, 97% (listed as Cobalt compounds), 97%, (CAS# 6147-53-1) which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.
Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not contain any Class 1 Ozone depleters. This material does not contain any Class 2 Ozone depleters.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA. None of the chemicals in this product are listed as Priority Pollutants under the CWA. None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
CAS# 6147-53-1 is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols:
XN
Risk Phrases:
R 22 Harmful if swallowed.
R 36 Irritating to eyes.
R 43 May cause sensitization by skin contact.
Safety Phrases:
S 24 Avoid contact with skin.
S 25 Avoid contact with eyes.

WGK (Water Danger/Protection)
CAS# 6147-53-1: 2
Canada - DSL/NDSL
None of the chemicals in this product are listed on the DSL or NDSL list. Canada - WHMIS
This product has a WHMIS classification of D2A, D2B.

Canadian Ingredient Disclosure List
CAS# 6147-53-1 is not listed on the Canadian Ingredient Disclosure List.
Exposure Limits

Section 16 - Additional Information

MSDS Creation Date: 9/02/1997
Revision #4 Date: 3/18/2003

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, however arising, even if Fisher has been advised of the possibility of such damages.