



LTS Research Laboratories, Inc.  
Safety Data Sheet  
Bis(cyclopentadienyl)cobalt

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1. Product and Company Identification

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Trade Name: Bis(cyclopentadienyl)cobalt  
Chemical Formula:  $C_{10}H_{10}Co$   
Recommended Use: Scientific research and development

Manufacturer/Supplier: LTS Research Laboratories, Inc.  
Street: 2001 Oaks Pkwy  
City: Belmont, Charlotte  
State: North Carolina  
Zip Code: 28012  
Country: USA  
Tel #: 855-587-2436 / 855-lts-chem

24-Hour Emergency Contact: 800-424-9300 (US & Canada)  
+1-703-527-3887 (International)

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2. Hazards Identification

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Signal Word:

Danger



Hazard Statements:

H228: Flammable solid  
H317: May cause an allergic skin reaction  
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H341: Suspected of causing genetic defects  
H351: Suspected of causing cancer

Precautionary Statements:

P202: Do not handle until all safety precautions have been read and understood  
P210: Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking  
P240: Ground/bond container and receiving equipment  
P241: Use explosion-proof electrical/ ventilating/ lighting/ equipment  
P261: Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray  
P272: Contaminated work clothing should not be allowed out of the workplace  
P280: Wear protective gloves/ eye protection/ face protection  
P281: Use personal protective equipment as required  
P285 In case of inadequate ventilation wear respiratory protection  
P302 + P352: IF ON SKIN: Wash with plenty of soap and water  
P304 + P341: IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing

P308 + P313: IF exposed or concerned: Get medical advice/ attention  
P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention  
P363: Wash contaminated clothing before reuse  
P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction  
P405: Store locked up  
P501: Dispose of contents/ container to an approved waste disposal plant

HMIS Health Ratings (0-4):

Health:	1
Flammability:	2
Physical:	1

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### 3. Composition

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Chemical Family: N/A  
Additional Names: Cobaltocene, Dicyclopentadienylcobalt

Bis(cyclopentadienyl)cobalt (C<sub>10</sub>H<sub>10</sub>Co):

Percentage:	100 wt%
CAS No:	1277-43-6
EC No:	215-061-0

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### 4. First Aid Procedures

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General Treatment: Seek medical attention if symptoms persist.  
Special Treatment: None  
Important Symptoms: None

Inhalation: Remove victim to fresh air. Supply oxygen if breathing is difficult.  
Ingestion: Give one to two glasses of water and induce vomiting. Never induce vomiting or give anything by mouth to an unconscious person.  
Skin: Wash affected area with mild soap and water. Remove any contaminated clothing.  
Eyes: Flush eyes with water, blinking often for several minutes. Remove contact lenses if present and easy to do. Continue rinsing

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### 5. Firefighting Measures

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Flammability: Flammable  
Extinguishing Media: No special restrictions – use suitable extinguishing agent for surrounding material and type of fire. Do not use water for metal fires – use CO<sub>2</sub>, sand, extinguishing powder.  
Spec. Fire Fighting Procedure: Use full-face, self-contained breathing apparatus with full protective clothing to prevent contact with skin and eyes. See section 10 for decomposition products.

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### 6. Accidental Release Measures

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If Material Is Released/Spilled: Wear appropriate respiratory and protective equipment specified in special protection information. Isolate spill area and provide ventilation. Vacuum up spill using a high efficiency particulate absolute (HEPA) air filter and place in a closed container for disposal. Take care not to raise dust.  
Environmental Precautions: Isolate runoff to prevent environmental pollution.

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## 7. Handling and Storage

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Handling Conditions:	Wash thoroughly after handling.
Storage Conditions:	Store in a cool dry place in a tightly sealed container. Store apart from materials and conditions listed in section 10.
Work/Hygienic Maintenance:	Do not use tobacco or food in work area. Wash thoroughly before eating and smoking. Do not blow dust off clothing or skin with compressed air.
Ventilation:	Provide sufficient ventilation to maintain concentration at or below threshold limit.

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## 8. Exposure Controls and Personal Protection

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Permissible Exposure Limits:	N/A
Threshold Limit Value:	N/A
Special Equipment:	None
Respiratory Protection:	Dust Respirator
Protective Gloves:	Rubber gloves
Eye Protection:	Safety glasses or goggles
Body Protection:	Protective work clothing. Wear close-toed shoes and long sleeves/pants.

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## 9. Physical and Chemical Characteristics

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Color	Black
Form:	Powder, Granules, Pellets, Sputtering target, Custom parts
Odor:	N/A
Water Solubility:	Insoluble
Boiling Point:	N/A
Melting Point:	173 °C
Flash Point:	N/A
Autoignition Temperature:	N/A
Density:	N/A
Molecular weight:	189.12 g/mol

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## 10. Reactivity

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Stability:	Stable under recommended storage conditions
Reacts With:	Strong oxidizing agents, Acids, Halogens
Incompatible Conditions:	Keep away from heat, flames, and sparks. Air sensitive. Moisture sensitive
Hazardous Decomposition Products:	None under recommended usage

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## 11. Toxicological Information

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Potential Health Effects:	
Eyes:	May cause irritation
Skin:	May cause irritation
Ingestion:	May cause irritation
Inhalation:	May cause irritation
Chronic:	N/A
Signs & Symptoms:	N/A
Aggravated Medical Conditions:	N/A
Median Lethal Dose:	LD50- 55 mg/kg for rat by mouth
Carcinogen:	N/A

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## 12. Ecological Information

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Aquatic Toxicity: N/A  
Persistent Bioaccumulation Toxicity: N/A  
Very Persistent, Very Bioaccumulative: N/A  
Notes: N/A

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## 13. Disposal Considerations

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Dispose of in accordance with local, state, national, and international regulations.

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## 14. Transportation Data

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Hazardous: Hazardous for transportation



Hazard Class: 4.1  
Packing Group: II  
UN Number: UN1325  
Proper Shipping Name: Flammable solid, organic, n.o.s. (Cobaltocene)

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## 15. Regulatory Information

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Sec 302 Extremely Hazardous: No  
Sec 304 Reportable Quantities: N/A  
Sec 313 Toxic Chemicals: Yes

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## 16. Other Information

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This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

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