Material Safety Data Sheet
Cobaltocene, 98\%

MSDS\# 11937
Section 1 - Chemical Product and Company Identification

| MSDS Name: Cobaltoc | Cobaltocene, 98\% |
| :---: | :---: |
| Catalog Numbers: AC4053 | AC405320000, AC405320010, AC405320050 |
| Synonyms: Di-pi-Cy | Di-pi-Cyclopentadienyl Cobalt; Bis(cyclopentadienyl)cobalt. |
| Company Identification: | Acros Organics BVBA Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium |
| Company Identification: (USA) | Acros Organics <br> One Reagent Lane <br> Fair Lawn, NJ 07410 |
| For information in the US, call: | all: 800-ACROS-01 |
| For information in Europe, call: | call: +32 14575211 |
| Emergency Number, Europe: | : +32 14575299 |
| Emergency Number US: | 201-796-7100 |
| CHEMTREC Phone Number, US: | er, US: 800-424-9300 |
| CHEMTREC Phone Number, Europe | er, Europe: 703-527-3887 |

Section 2 - Composition, Information on Ingredients

| CAS\#: | $1277-43-6$ |
| :--- | :--- |
| Chemical Name: | Cobaltocene |
| \%: | 98.0 |
| EINECS\#: | $215-061-0$ |

Hazard Symbols: XI


Risk Phrases:

10 36/37/38
Section 3 - Hazards Identification

## EMERGENCY OVERVIEW

Warning! Flammable solid. Air sensitive. Moisture sensitive. May cause central nervous system depression. Causes eye, skin, and respiratory tract irritation. Target Organs: Central nervous system.
Potential Health Effects
Eye: Causes eye irritation.
Skin: Causes skin irritation. May cause dermatitis. May cause cyanosis of the extremities.
May cause gastrointestinal irritation with nausea, vomiting and diarrhea. Ingestion of large amounts may cause CNS depression.
Inhalation: Causes respiratory tract irritation.
Chronic: No information found.
medical aid immediately.
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:

Inhalation:
Notes to
Physician:

General Information:

Extinguishing Media:

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.
Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable solid.
For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use

Autoignition ${ }^{\text {N }}$ Not available.
Temperature: water spray, fog, or alcohol-resistant foam. Water may be ineffective. Use agent most appropriate to extinguish fire. Do NOT get water inside containers. Do NOT use straight streams of water. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not available
Explosion Not available
Limits: Lower:
Explosion
Limits: Upper:
Not available
NFPA Rating: health: 1 ; flammability: 2 ; instability: 0 ;

## Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.
Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. Place under an inert atmosphere. Do not get water inside containers. A vapor suppressing foam may be used to reduce vapors.

## Section 7 - Handling and Storage

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Minimize dust generation and accumulation. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Keep away from
Handling: heat, sparks and flame. Avoid ingestion and inhalation. Use with adequate ventilation. Handle under an inert atmosphere. Store protected from air. Do not allow contact with water. Wash clothing before reuse. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep from contact with moist air and steam.

Keep away from heat, sparks, and flame. Keep away from sources of ignition. Keep container closed when not in use. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Keep refrigerated. (Store below $4^{\circ} \mathrm{C} / 39^{\circ} \mathrm{F}$.) Do not expose to air. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection


OSHA Vacated PELs: Cobaltocene: None listed
Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.
Exposure Limits
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 protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators:
A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties
Physical State: Crystals
Color: black-violet
Odor: Not available
pH : Not available
Vapor Pressure: Not available
Vapor Density: Not available
Evaporation Rate: Not available
Viscosity: Not available
Boiling Point: Not available
Freezing/Melting Point: $178 \operatorname{deg} \mathrm{C}\left(352.40^{\circ} \mathrm{F}\right)$
Decomposition Temperature: Not available
Solubility in water: $<0.1 \mathrm{~g} / 100 \mathrm{~mL}$ at 21.5 C
Specific Gravity/Density:
Molecular Formula: C10H10Co
Molecular Weight: 189.12
Section 10 - Stability and Reactivity
Stable at room temperature in closed containers under normal storage and handling conditions.
Incompatible materials, ignition sources, dust generation, moisture, exposure to air, excess heat, strong oxidants.

Strong oxidizing agents, acids, moisture, air.

Carbon monoxide, carbon monoxide, carbon dioxide.
Has not been reported.
Section 11 - Toxicological Information

RTECS\#:
LD50/LC50:
Carcinogenicity:
Other:

Other:
No information available.
Section 13 - Disposal Considerations
Dispose of in a manner consistent with federal, state, and local regulations.
Section 14-Transport Information
US DOT
Shipping Name: Please contact Fisher Scientific for shipping information
Hazard Class:
UN Number:

Packing Group:
Canada TDG
Shipping Name: Not available
Hazard Class:
UN Number:
Packing Group:

## Section 15 - Regulatory Information

European/International Regulations

## European Labeling in Accordance with EC Directives

Hazard Symbols: XI
Risk Phrases:
R 10 Flammable.
R 36/37/38 Irritating to eyes, respiratory system and skin.
Safety Phrases:
S 9 Keep container in a well-ventilated place.
S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 33 Take precautionary measures against static discharges.
S 37/39 Wear suitable gloves and eye/face protection.
WGK (Water Danger/Protection)
CAS\# 1277-43-6: Not available
Canada
CAS\# 1277-43-6 is listed on Canada's NDSL List
Canadian WHMIS Classifications: B4, D2B
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.
CAS\# 1277-43-6 is not listed on Canada's Ingredient Disclosure List.
US Federal
TSCA
CAS\# 1277-43-6 is listed on the TSCA
Inventory.
Section 16 - Other Information
MSDS Creation Date: 4/05/1997
Revision \#10 Date 7/20/2009

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