

SAFETY DATA SHEET

Date Printed: 05/14/2024 **Date Revised:** 01/15/2022

SECTION 1. IDENTIFICATION

Product Identifier: (5N) 99.999% Cobalt(II) 2-ethylhexanoate Solution

Product Code: CO-2EH-05-SOL

CAS Number: 136-52-7

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

GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.

GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

GHS08 Health hazard

Carc. 2 H351 Suspected of causing cancer.

GHS label elements The product is classified and labeled according to the Globally Harmonized

System (GHS). Hazard pictograms







GHS02 GHS06 GHS08

Signal word Danger

Hazard-determining components of labeling:

cobalt bis(2-ethylhexanoate)

Hazard statements

H226 Flammable liquid and vapor.

H301 Toxic if swallowed.

H351 Suspected of causing cancer.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)

2

2

Health = 2

Fire = 2

Reactivity = 0

HMIS-ratings (scale 0 - 4)

HEALTH

FIRE

REACTIVITY

2

2

Health = 2

Fire = 2

1110 – 2

Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT: N/A vPvB: N/A

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description: Mixture of the substances listed below with nonhazardous additions.

Dangerous components:

136-52-7 cobalt bis(2-ethylhexanoate)

SECTION 4. FIRST AID MEASURES

Description of first aid measures

General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours

after the accident.

If inhaled: Supply fresh air; consult doctor in case of complaints.

In case of skin contact: Generally the product does not irritate the skin.

In case of eye contact: Rinse opened eye for several minutes under running water.

If swallowed: Immediately call a doctor.

Most important symptoms and effects, both acute and delayed:

No data available

Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5. FIREFIGHTING MEASURES

Extinguishing media

Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture No data available

Advice for firefighters

Protective equipment: No special measures required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Keep unprotected persons away.

Environmental precautions: No special measures required.

Methods and materials for containment and cleanup:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles: No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions: Keep receptacle tightly sealed.

Specific end use(s) No data available

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Additional information about design of technical systems: No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:

136-52-7 cobalt bis(2-ethylhexanoate)

TLV Long-term value: 0.02 mg/m³

as Co. BEI

Additional information: The lists that were valid during the creation were used as basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use

respiratory protective device that is independent of circulating air.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the

chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and

varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance

of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be

observed.

Eye protection:

Tightly sealed goggles

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance: Form: Liquid Color: Violet

Odor: Characteristic

Odor threshold: No data available.

pH: No data available.

Melting point/Melting range: Undetermined. Boiling point/Boiling range: Undetermined.

Flash point: 40 °C (104 °F) Flammability (solid, gas): N/A Ignition temperature: 229 °C (444 °F)

Decomposition temperature: No data available.

Autoignition: Product is not selfigniting.

Danger of explosion: Product is not explosive. However, formation of explosive air/vapor

mixtures are possible. Explosion limits: Lower: 0.7 Vol %

Upper: 8.9 Vol %

Vapor pressure: No data available.

Density: No data available.

Relative density No data available. Vapor density No data available. Evaporation rate No data available.

Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

Partition coefficient (n-octanol/water): No data available.

Viscosity:

Dynamic: No data available. Kinematic: No data available.

Solvent content:

Organic solvents: 0.0 %

Other information No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions No dangerous reactions known.

Conditions to avoid No data available Incompatible materials: No data available

Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity:

Primary irritant effect:

on the skin: No irritant effect. on the eye: No irritating effect.

Sensitization: No sensitizing effects known.

Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for

preparations:

Harmful

Carcinogenic categories

IARC (International Agency for Research on Cancer)

136-52-7 cobalt bis(2-ethylhexanoate) 2B

NTP (National Toxicology Program)

None of the ingredients is listed.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity: No data available

Persistence and degradability No data available Bioaccumulative potential No data available

Mobility in soil No data available

Additional ecological information: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: N/A vPvB: N/A

Other adverse effects No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to enter drains, sewage systems, or other water courses system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION

UN-Number

DOT, IMDG, IATA UN1993

UN proper shipping name

DOT Flammable liquids, n.o.s.

IMDG, IATA FLAMMABLE LIQUID, N.O.S.

Transport hazard class(es)

DOT

Class 3 Flammable liquids

Label 3

IMDG, IATA

Class 3 Flammable liquids

Label 3

Packing group

DOT, IMDG, IATA III

Environmental hazards:

Marine pollutant: No

Special precautions for user Warning: Flammable liquids

EMS Number: F-E,S-E

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code N/A

Transport/Additional information:

DOT

Quantity limitations On passenger aircraft/rail: 60 L

On cargo aircraft only: 220 L

IMDG

Limited quantities (LQ) 5L

Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

UN "Model Regulation": UN1993, Flammable liquids, n.o.s., 3, III

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara

Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

All ingredients are listed.

TSCA (Toxic Substances Control Act):

All ingredients are listed.

Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

Carcinogenic categories

EPA (Environmental Protection Agency)

None of the ingredients is listed.

TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

~?GHS02~?GHS06~?GHS08

Signal word Danger

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present and easy to do. Continue rinsing.

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P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.