

Chemical Safety Data Sheet MSDS / SDS

Cobalt naphthenate

Revision Date:2026-06-06 Revision Number:1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name : Cobalt naphthenate
CBnumber : CB6483937
CAS : 61789-51-3
EINECS Number : 263-064-0
Synonyms : cobalt naphthenate,Cobaltous naphthenate

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses : For R&D use only. Not for medicinal, household or other use.
Uses advised against : none

Company Identification

Company : Chemicalbook
Address : Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing
Telephone : 010-86108875

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Danger

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.
P331 Do NOT induce vomiting.

Hazard statements

H412 Harmful to aquatic life with long lasting effects
H372 Causes damage to organs through prolonged or repeated exposure
H372 Causes damage to organs through prolonged or repeated exposure

H317 May cause an allergic skin reaction

H304 May be fatal if swallowed and enters airways

H226 Flammable liquid and vapour

SECTION 3: Composition/information on ingredients

Substance

Product name : Cobalt naphthenate
Synonyms : cobalt naphthenate,Cobaltous naphthenate
CAS : 61789-51-3
EC number : 263-064-0
MF : C22H16CoO4
MW : 403.293

SECTION 4: First aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air. Call in physician.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: caution if victim vomits. Risk of aspiration! Keep airways free. Pulmonary failure possible after aspiration of vomit. Call a physician immediately.

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Protection of first-aiders

For personal protection see section 8.

Notes to physician

No data available

SECTION 5: Firefighting measures

Suitable extinguishing media

Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

Specific hazards during fire fighting

Mixture with combustible ingredients. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air at elevated temperatures. Development of hazardous combustion gases or vapours possible in the event of fire.

Hazardous combustion products

Nature of decomposition products not known.

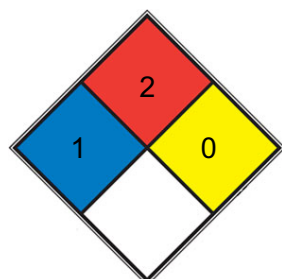
Specific extinguishing methods

Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

NFPA 704



■ HEALTH 1 Exposure would cause irritation with only minor residual injury (e.g. [acetone](#), sodium bromate, potassium chloride)

Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely

■ FIRE 2 divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, [sulfur](#))

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, [N₂](#))

□ SPEC.

□ HAZ.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency

responders: For personal protection see section 8.

Environmental precautions

Do not let product enter drains. Risk of explosion.

Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material. Dispose of properly. Clean up affected area.

SECTION 7: Handling and storage

Handling

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Advice on safe handling

Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols.

Avoidance of contact

Strong oxidizing agents

Storage

Further information on storage conditions

Keep container tightly closed in a dry and wellventilated place. Keep away from heat and sources of ignition. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

3, Flammable liquids

Recommended storage temperature

Recommended storage temperature see product label.

SECTION 8: Exposure controls/personal protection

control parameter

Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

Engineering measures

No data available

Personal protective equipment

Respiratory protection

required when vapours/aerosols are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type

Filter type ABEK

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Safety glasses

Skin and body protection

Flame retardant antistatic protective clothing.

Hand protection

Remarks

required

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

liquid

Color

dark, purple

Odor

No data available

Odor Threshold

No data available

pH

No data available

Melting point/ range

No data available

Boiling point/boiling range

> 300 °C

Solvent Flash point: 48.9 °C

Method: Tag closed cup

Evaporation rate

No data available

Flammability (solid, gas)

No data available

Flammability (liquids)

No data available

Burning rate

No data available

Upper explosion limit / Upper flammability limit

6 %(V)

Lower explosion limit / Lower flammability limit

1 %(V)

Vapor pressure

0Pa at 20°C

Relative vapor density

No data available

Relative density

0.921 g/mL at 25 °C

Density

0.921 g/mL (25 °C)

Water solubility

negligible

Partition coefficient: n-octanol/water

No data available

Autoignition temperature

No data available

Decomposition temperature

No data available

Viscosity, dynamic

No data available

Viscosity, kinematic

No data available

Flow time

No data available

Explosive properties

Not classified as explosive.

Oxidizing properties

none

Particle characteristics Particle size

No data available

Flash point

120 °F

Physical state

liquid

SECTION 10: Stability and reactivity

Reactivity

Vapor/air-mixtures are explosive at intense warming.

Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions

No data available

Conditions to avoid

Heating.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture Acute toxicity

LD50 Oral - Rat - 3,900 mg/kg

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Classified based on available data. For more details, see section 2

Serious eye damage/eye irritation

Classified based on available data. For more details, see section 2

Respiratory or skin sensitization

Mixture may cause an allergic skin reaction.

Germ cell mutagenicity

Classified based on available data. For more details, see section 2

Carcinogenicity

Classified based on available data. For more details, see section 2

Reproductive toxicity

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

Specific target organ toxicity - repeated exposure

Mixture causes damage to organs through prolonged or repeated exposure.

- Central nervous system

Mixture causes damage to organs through prolonged or repeated exposure.

- Gastrointestinal tract

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonitis.

11.2 Additional Information

Other dangerous properties can not be excluded.

This substance should be handled with particular care.

Handle in accordance with good industrial hygiene and safety practice.

Components Naphthenic acids, cobalt salts

Acute toxicity

LD50 Oral - Rat - female - 3,129 mg/kg (OECD Test Guideline 425)

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Skin - reconstructed human epidermis (RhE)

Result: No skin irritation - 3 - 60 min (OECD Test Guideline 431)

Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation (OECD Test Guideline 405)

Respiratory or skin sensitization

Local lymph node assay (LLNA) - Mouse

Result: positive

Remarks: (ECHA)

Germ cell mutagenicity

Classified based on available data. For more details, see section 2

Carcinogenicity

Classified based on available data. For more details, see section 2

Reproductive toxicity

Suspected of damaging the unborn child.

Suspected of damaging fertility.

Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

Specific target organ toxicity - repeated exposure

Oral - Causes damage to organs through prolonged or repeated exposure.

- Gastrointestinal tract

Aspiration hazard

Classified based on available data. For more details, see section 2

Stoddard solvent (<0,1% benzene) Acute toxicity

Oral: No data available

Inhalation: No data available

Dermal: No data available

Skin corrosion/irritation

Classified based on available data. For more details, see section 2

Serious eye damage/eye irritation

Classified based on available data. For more details, see section 2

Respiratory or skin sensitization

Classified based on available data. For more details, see section 2

Germ cell mutagenicity

Classified based on available data. For more details, see section 2

Carcinogenicity

Classified based on available data. For more details, see section 2

Reproductive toxicity

Classified based on available data. For more details, see section 2

Specific target organ toxicity - single exposure

Classified based on available data. For more details, see section 2

Specific target organ toxicity - repeated exposure

Causes damage to organs through prolonged or repeated exposure.

- Central nervous system

Aspiration hazard

Aspiration hazard, Aspiration may cause pulmonary edema and pneumonit- is.

SECTION 12: Ecological information

Ecotoxicity

Components:

Naphthenic acids, cobalt salts:

Toxicity to fish

LC50 (Pimephales promelas (fathead minnow)): 1.86 mg/l End point: mortality Exposure time: 96 h Test Type: semi-static test Analytical monitoring: yes Method: US-EPA GLP: yes

Toxicity to algae/aquatic plants

ErC50 (Pseudokirchneriella subcapitata): 0.095 mg/l Exposure time: 72 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 201 GLP: yes

Toxicity to fish (Chronic toxicity)

NOEC (Pimephales promelas (fathead minnow)): 0.9 mg/l End point: mortality Exposure time: 7 d Test Type: semi-static test Analytical monitoring: yes Method: US-EPA GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)

NOEC (Ceriodaphnia dubia (water flea)): 0.02 mg/l End point: mortality Exposure time: 7 d Test Type: semi-static test Analytical monitoring: yes Method: US-EPA GLP: yes

Toxicity to microorganisms

EC50 (activated sludge): 120 mg/l End point: Growth rate Exposure time: 30 min Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 209 GLP: yes

Ecotoxicology Assessment

Acute aquatic toxicity

This product has no known ecotoxicological effects.

Chronic aquatic toxicity

Harmful to aquatic life with long lasting effects.

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13: Disposal considerations

Disposal methods

Waste from residues

Offer surplus and non-recyclable solutions to a licensed disposal company.

SECTION 14: Transport information

International Regulations

IATA-DGR

UN/ID No. : UN 1993

Proper shipping name : Flammable liquid, n.o.s.

(Stoddard solvent (<0,1% benzene))

Class : 3

Packing group : III

Labels : Class 3 - Flammable liquids

Packing instruction (cargo aircraft) : 366

Packing instruction (passenger aircraft) : 355

IMDG-Code

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Stoddard solvent (<0,1% benzene))

Class : 3

Packing group : III

Labels : 3

EmS Code : F-E, S-E

Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National regulation

JTT 617

UN number : UN 1993

Proper shipping name : FLAMMABLE LIQUID, N.O.S.

(Stoddard solvent (<0,1% benzene))

Class : 3

Packing group : III

Labels : 3

Environmentally hazardous : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15: Regulatory information

National regulatory information

Law on the Prevention and Control of Occupational Diseases

Regulations on Safety Management of Hazardous Chemicals

Catalogue of Hazardous Chemicals

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218)

No. / Code Chemical name / Category Threshold quantity

W5.4 Flammable liquids 5,000 t

Hazardous Chemicals for Priority Management

Listed under SAWS

Regulations on Occupational Labor Protection in the at workplaces where

Toxic Substances Are Used

Catalogue of Highly Toxic Chemicals

Not listed

Regulation of Environmental Management on the First Import of Chemicals and the Import and Export of Toxic Chemicals

China Severely Restricted Toxic Chemicals for Import and Export

Listed

SECTION 16: Other information

Full text of other abbreviations

ACGIH

USA. ACGIH Threshold Limit Values (TLV)

GBZ 2.1-2007

Occupational exposure limits for hazardous agents in the workplace - Chemical hazardous agents.

ACGIH / TWA

8-hour, time-weighted average

GBZ 2.1-2007 / PC-TWA

Permissible concentration - time weighted average

GBZ 2.1-2007 / PC-STEL AIIc - Australian Invent Transport by Land of Bra bw - Body weight; CMR Standard of the German List (Canada); ECx - Conc associated with x%respo Chemical Substances (Jap response; ERG - Emerge GLP - Good Laboratory P cer; IATA - International Construction and Equipm Half maximal inhibitory c tion; IECSC - Inventory o tional Maritime Dangerou Industrial Safety and H Standardization; KECl - K tration to 50 % of a test (Median Lethal Dose); MA lution from Ships; n.o.s. No Observed (Adverse) E fect Level; NOELR - No Norm; NTP - National Toxi icals; OECD - Organizatio fice of Chemical Safety a and Toxic substance; PIC stances; (Q)SAR - (Quant (EC) No 1907/2006 of th Registration, Evaluation, Accelerating Decompositi Chemical Substance Inve Thailand Existing Chemica States); UN - United Nat Transport of Dangerous WHMIS - Workplace Hazar Permissible concentration - short term exposure limit ry of Industrial Chemicals

ANTT - National Agency for il
 ASTM - American Society for the Testing of Materials
 - Carcinogen, Mutagen or Reproductive Toxicant
 DIN nstitute for Standardisation
 DSL - Domestic Substances ntration associated with x% response
 ELx - Loading rate se
 EmS - Emergency Schedule
 ENCS - Existing and New n)
 ErCx - Concentration associated with x% growth rate cy Response Guide
 GHS - Globally Harmonized System
 actice
 IARC - International Agency for Research on Canir Transport Association
 IBC - International Code for the nt of Ships carrying Dangerous Chemicals in Bulk
 IC50 ncentration
 ICAO - International Civil Aviation Organiza- Existing Chemical Substances in China
 IMDG - Interna- Goods
 IMO - International Maritime Organization
 ISHL alth Law (Japan)
 ISO - International Organisation for rea Existing Chemicals Inventory
 LC50 - Lethal Concenopulation
 LD50 - Lethal Dose to 50% of a test population POL - International Convention for the Prevention of Pol- Not Otherwise Specified
 Nch - Chilean Norm
 NO(A)EC fect Concentration
 NO(A)EL - No Observed (Adverse) Efbserveable Effect Loading Rate
 NOM - Official Mexican ology Program
 NZIoC - New Zealand Inventory of Chemfor Economic Co-operation and Development
 OPPTS - Ofd Pollution Prevention
 PBT - Persistent, Bioaccumulative S - Philippines Inventory of Chemicals and Chemical Subtative) Structure Activity Relationship
 REACH - Regulation European Parliament and of the Council concerning the uthorisation and Restriction of Chemicals
 SADT - Selfn Temperature
 SDS - Safety Data Sheet
 TCSI - Taiwan tory
 TDG - Transportation of Dangerous Goods
 TECI s Inventory
 TSCA - Toxic Substances Control Act (United ons
 UNRTDG - United Nations Recommendations on the oods
 vPvB - Very Persistent and Very Bioaccumulative
 ous Materials Information System

Disclaimer:

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.