

Material Safety Data Sheet

(12500)

Section 1: Chemical Product and Company Identification

Product Name: Cobalt naphthenate

Catalog Number: 12500

CAS#: see Section 3

Contact Information:

Electron Microscopy Sciences

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Order Online: emsdiasum.com

CHEMTREC (24-Hour Emergency Telephone), call: 1-800-424-9300

Section 2: Composition and Information on Ingredients

Emergency Overview

OSHA Hazards

Combustible Liquid, Carcinogen, Target Organ Effect, Skin and respiratory sensitizer

Target Organs

Thyroid, Heart, Male reproductive system, blood

GHS Classification

Flammable liquids (Category 3)

Acute toxicity, Oral (Category 5)

Eye irritation (Category 2B)

Respiratory sensitization (Category 1)

Skin sensitization (Category 1)

Aspiration hazard (Category 1)

GHS Label elements, including precautionary statements

Signal Word: Danger

Hazard statement(s)

H226: Flammable liquid and water

H303: May be harmful if swallowed

H304: May be fatal if swallowed and enters airways

H317: May cause an allergic skin reaction

H320: Cause eye irritation

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statement(s)

P261: Avoid breathing dust/fume/gas/mist/vapors/spray

P280: Wear protective gloves

P301 + P310: If swallowed: immediately call a poison center or doctor/physician

P305 + P351 + P338: If in eyes: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331: Do not induce vomiting
P342 + P311: If experiencing respiratory symptoms: Call a poison center or doctor/physician

HMIS Classification

Health Hazard: 2
Chronic Health hazard: *
Flammability: 2
Physical hazards: 0

NFPA Rating

Health hazard: 0
Fire: 2
Reactivity hazard: 0

Potential Health Effects

Inhalation: May be harmful if inhaled. May cause respiratory tract infection.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation
Ingestion: May be harmful if swallowed. Aspiration hazard if swallowed – can enter lungs and cause damage.

Section 3: Hazards Identification

CAS #	EC No.	Index No.	Concentration
Naphthenic acids, cobalt salts			
61789-51-3	263-064-0	--	< = 65%
Aliphatic hydrocarbons (Stoddard type)			
8-52-41-3	232-489-3	649-345-00-4	< = 40%

Section 4: First Aid Measures

General Advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician

If swallowed

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5: Fire and Explosion Data

Conditions of flammability

Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat/sparks/open flame/hot surface. No smoking.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Special protective equipment for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. Nature of decomposition products not known.

Further information

Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see Section 13).

Section 7 : Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.
Keep away from sources of ignition. No smoking. Take measures to prevent the build-up of electrostatic charge.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8: Exposure Controls/Personal Protection

Components with workplace control parameters

Components	CAS No.	Value	Control Parameters	Basis
Naphthenic acids, cobalt salts	61789-51-3			
Remarks	Pulmonary function Asthma Myocardial effects Substances for which there is a Biological Exposure Index of Indices (see BEI® section) Confirmed animal carcinogen with unknown relevance to humans: The agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure. Varies.			

Aliphatic hydrocarbons (Stoddard type)	8052-41-3	TWA	10 ppm	USA ACGIH Threshold Limit Values (TLV)
Remarks	Central Nervous System impairment nausea, eye, skin, and kidney damage			
		TWA	350 mg/m3	USA NIOSH Recommended Exposure Limits
	A refined petroleum solvent with a flash point of 102-110F, boiling point of 309-396F, and containing >65% C10 or higher hydrocarbons. 15 minute ceiling value.			
		C	1,800 mg/m3	USA NIOSH recommended Exposure Limits
	A refined petroleum solvent with a flash point of 102-110F, boiling point of 309-396F, and containing >65% C10 or higher hydrocarbons. 15 minute ceiling value.			
		TWA	500 ppm 2,900 mg/m3	USA Occupational Exposure Limits (OSHA) – Table Z-1 Limits for Air Contaminants
	The value in mg/m3 is approximate.			
		TWA	100 ppm 525 mg/m3	USA OSHA – Table Z-1 Limits of Air Contaminants – 1010.1000

Personal Protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

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

Skin and body protection

Complete suit protecting against chemicals. Flame retardant antistatic protective clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the work day.

Section 9: Physical and Chemical Properties

Appearance

Form: liquid
Color: purple

Safety data

pH: no data available
Melting Point/Freezing point: no data available

Boiling Point: > 300 °C (> 572 °F) – Solvent

Flash Point: 48.9 °C (120.0 °F) – tag closed cup
Ignition temperature: no data available
Autoignition temperature: no data available
Lower explosion limit: 1% (V)
Upper explosion limit: 6% (V)
Vapor pressure: no data available
Density: 0.921 g/mL at 25 °C (77 °F)
Water solubility: negligible
Partition coefficient: no data available
n-octanol/water
Relative vapor density: no data available
Odor: no data available
Odor Threshold: no data available
Evaporation rate: no data available

Section 10: Stability and Reactivity Data

Chemical stability

Stable under recommended storage conditions

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames, and sparks

Materials to avoid

Strong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions – Nature of decomposition products not known. Other decomposition products – no data available

Section 11: Toxicological Information

Acute Toxicity

Oral LD50

LD50 Oral – rat – 3,900 mg/kg

No data available

Inhalation LC50

No data available

Dermal LD50

No data available

Other information on acute toxicity

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

IARC: 2B – Group 2B: Possibly carcinogenic to humans (Naphthenic acids, cobalt salts)

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

No data available

Teratogenicity

No data available

Specific target organ toxicity – single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity – repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion: May be harmful if swallowed. Aspiration hazard if swallowed – can enter lungs and cause damage.

Skin: May be harmful if absorbed through skin. May cause irritation.

Eyes: May cause eye irritation.

Synergistic effects

No data available

Additional Information

RTECS: Not available

Section 12: Ecological Information

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

PBT and vPvB assessment

No data available

Other adverse effects

No data available

Section 13: Disposal Considerations

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Section 14: Transport Information

DOT (US)

UN Number: 1993 Class: 3 Packing Group: III
Proper shipping name: Flammable liquids, n.o.s. (Aliphatic hydrocarbons (Stoddard type))
Reportable Quantity (RQ):
Marine pollutant: no
Poison Inhalation Hazard: no

IMDG

UN Number: 1993 Class: 3 Packing Group: III EMS-No: F-E, S-E
Proper shipping name: Flammable liquid, n.o.s. (Aliphatic hydrocarbons (Stoddard type))
Marine pollutant: No

IATA

UN Number: 1993 Class: 3 Packing Group: III
Proper shipping name: Flammable liquid, n.o.s. (Aliphatic hydrocarbons (Stoddard type))

Section 15: Other Regulatory Information

OSHA Hazards

Combustible Liquid, Carcinogen, Target Organ Effect, skin and respiratory sensitizer

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

	CAS No.	Revision Date
Naphthenic acids, cobalt salts	61789-51-3	2007-03-01
SARA 311/312 Hazards		
Fire Hazard, Acute Health Hazard, Chronic Health Hazard		
Massachusetts Right to Know Components		
Aliphatic hydrocarbons (Stoddard	8052-41-3	1993-04-24

type)		
Pennsylvania Right to Know Components		
Aliphatic hydrocarbons (Stoddard type)	8052-41-3	1993-04-24
Naphthenic acids, cobalt salts	61789-51-3	2007-03-01
New Jersey Right to Know Components		
Aliphatic hydrocarbons (Stoddard type)	8052-41-3	1993-04-24
Naphthenic acids, cobalt salts	61789-51-3	2007-03-01
California Prop. 65 Components		
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.		

Section 16: Other Information:

Last Updated: 9/28/11

Date Verified and Printed: 9/28/11

The information above is believed to be accurate and represents the best information currently available to us. However, we make no 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 Electron Microscopy Sciences 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, howsoever arising, even if Electron Microscopy Sciences has been advised of the possibility of such damages.