Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.07.2013 Revision: 26.05.2010

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

1.1 Product identifier

Cobalt naphthenate, 53% in mineral spirits
40387

Trade name Stock number: CAS Number: 61789-51-3

EC number: 263-064-0

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

S1124 Scientific research and developr SU24 Scientific research and development

1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG A Johnson Matthey Company Zeppelinstr. 7b Zeppelinsti. 7b 76185 Karlsruhe / Germany Tel: +49 (0) 721 84007 280 Fax: +49 (0) 721 84007 300 Email: tech@alfa.com

Informing department:

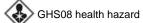
www.alfa.com
www.alfa.com
product safety Tel + +049 (0) 7275 988687-0
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240 1.4 Emergency telephone number:

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008



Flam. Liq. 3 H226 Flammable liquid and vapour.



Carc. 2 H351 Suspected of causing cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.



Skin Sens. 1 H317 May cause an allergic skin reaction.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

Xn; Harmful

R40-65: Limited evidence of a carcinogenic effect. Harmful: may cause lung damage if swallowed.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

Flammable

Information concerning particular hazards

for human and environment: Other hazards that do not result in Not applicable

classification No information known.

2.2 Label elements Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms Signal word Hazard statements

Danger H326 Flammable liquid and vapour.
H317 May cause an allergic skin reaction.
H351 Suspected of causing cancer.
H304 May be fatal if swallowed and enters airways.

Precautionary statements

P280 Wear protective gloves / protective clothing.
P262 Do not get in eyes, on skin, or on clothing.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P315 Get immediate medical advice/attention.

The substance is classified and labelled according to the CLP regulation. GHS02, GHS07, GHS08

.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances

After skin contact

CAS# Designation: Identification number(s): 61789-51-3 Cobalt naphthenate, 53% in mineral spirits

EC number: 263-064-0

SECTION 4: First aid measures

4.1 Description of first aid measures After inhalation

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice

Rinse opened eye for several minutes under running water. Then consult doctor. Seek medical treatment. After eve contact

After swallowing

4.2 Most important symptoms and effects, both acute and delayed

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents

Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling exposed containers.

5.2 Special hazards arising from the

substance or mixture

If this product is involved in a fire, the following can be released:

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Carbon monoxide and carbon dioxide

oxic metal oxide smoke

5.3 Advice for firefighters Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

6.2 Environmental precautions:

Keep away from ignition sources

Do not allow material to be released to the environment without proper governmental permits.

Do not allow product to reach sewage system or water bodies. Do not allow to enter the ground/soil.

6.3 Methods and material for containment

and cleaning up:

Keep away from ignition sources.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose of contaminated material as waste according to item 13.
Keep away from ignition sources.

Prevention of secondary hazards: 6.4 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 information on disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against

explosions and fires:

Protect against electrostatic charges. Fumes can combine with air to form an explosive mixture.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Requirements to be met by storerooms and

containers:

Information about storage in one common

storage facility: Further information about storage

conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. Store in cool, dry conditions in well sealed containers.

7.3 Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of

technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

Cobalt, elemental & inorganic compounds, as Co

mg/m3 0.02; Confirmed animal carcinogen ACGIH TLV Austria

0.02; Confirmed animal carcinoger
Carcinogen
0.05
0.05 (skin)
Carcinogen
0.1; 0.2-STEL
0.05; 2B-Carcinogen
0.02; Confirmed animal carcinogen
C-TGG 0.05 Belgium TWA Denmark TWA Finland TWA Germany Hungary TWA Japan OEL Korea TLV

Netherlands MAC-Norway TWA Poland TWA 0.05 0.05; 0.2-STEL 0.5-STEL Russia

Sweden NGV

Sweden NGV 0.05 Switzerland MAK-W 0.1; Carcinogen United Kingdom TWA 0.1 USA PEL 0.1 (dust and fume)

Additional information: No data

8.2 Exposure controls

Personal protective equipment
General protective and hygienic measures

The usual precautionary measures should be adhered to in handling the chemicals. Keep away from foodstuffs, beverages and food. Instantly remove any soiled and impregnated garments. Wash hands during breaks and at the end of the work. Maintain an ergonomically appropriate working environment. Use breathing protection with high concentrations. Check protective gloves prior to each use for their proper condition. 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.

Breathing equipment: Protection of hands:

Material of gloves Penetration time of glove material Eye protection:

Impervious gloves Not determined Safety glasses
Face protection
Protective work clothing.

Body protection:

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information Appearance:

Viscous liquid Form: Colour: Purple Petroleum-like Smell:

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Odour threshold: Not determined pH-value: Not determined

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Not determined

Inflammability (solid, gaseous)
Ignition temperature:
Decomposition temperature:
Self-inflammability:
Critical values for explosion: Not determined. Not determined Not determined Not determined.

Lower: Upper: Steam pressure: Not determined Not determined Not determined Density Relative density Not determined Not determined. Vapour density Not determined Evaporation rate Solubility in / Miscibility with Not determined.

Not miscible or difficult to mix Not determined. Water: Partition coefficient (n-octanol/water):

dvnamic: Not determined. kinematic Not determined.

9.2 Other information No further relevant information available

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be

avoided: 10.3 Possibility of hazardous reactions 10.5 Incompatible materials: 10.6 Hazardous decomposition products:

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications. Reacts with strong oxidizing agents

No information known.

Oxidizing agents
Carbon monoxide and carbon dioxide
Toxic metal oxide smoke

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: No effects known.

LD/LC50 values that are relevant for classification:

Oral LD50 3900 mg/kg (rat) (RTECS)

Skin irritation or corrosion: Eye irritation or corrosion: Sensitization: Germ cell mutagenicity: May cause irritation May cause irritation

May cause an allergic skin reaction. No effects known.

Carcinogenicity:

No effects known. Suspected of causing cancer. IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals. ACGIH A3: Animal carcinogen: 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) not considered relevant to worker exposure. Available epidemologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence suggests that the agent is not likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure. The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for this product. No effects known.

Specific target organ system toxicity -

repeated exposure: Specific target organ system toxicity - single

Reproductive toxicity:

No effects known.

Aspiration hazard:
Additional toxicological information: May be fatal if swallowed and enters airways. To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

SECTION 12: Ecological information

12.1 Toxicity

General notes:

12.1 TOXICITY
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential
12.4 Mobility in soil
Additional ecological information:

No further relevant information available. No further relevant information available. No further relevant information available. No further relevant information available.

Do not allow material to be released to the environment without proper governmental permits. Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Avoid transfer into the environment. 12.5 Results of PBT and vPvB assessment

PRT

vPvB:

Not applicable.

Not applicable.
No further relevant information available 12.6 Other adverse effects

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recommendation

Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal.

Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

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SECTION 14: Transport information	
UN-Number ADR, IMDG, IATA	UN1993
14.2 UN proper shipping name ADR	1993 FLAMMABLE LIQUID, N.O.S. (Cobalt naphthenate, 53% in mineral spirits)
IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (Cobalt naphthenate, 53% in mineral spirits)
14.3 Transport hazard class(es)	
ADR	
Class Label IMDG, IATA	3 (F1) Flammable liquids.
*	
Class	3 Flammable liquids.
Label	3
Packing group ADR, IMDG, IATA	III
14.5 Environmental hazards:	Not applicable.
14.6 Special precautions for user Kemler Number:	Warning: Flammable liquids. 30
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.	
Transport/Additional information:	
ADR	
Excepted quantities (EQ): Limited quantities (LQ)	E1 5L
Limited quantities (LQ)	5L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Australian Inventory of Chemical Substances Substance is listed.

Standard for the Uniform Scheduling of Drugs and Poisons

National regulations

Transport category
Tunnel restriction code

UN "Model Regulation":

Information about limitation of use:

Substance is not listed.

Employment restrictions concerning young persons must be observed. For use only by technically qualified individuals.

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Water hazard class:
Other regulations, limitations and prohibitive regulations
ELINCS (European List of Notified Chemical

Substances)

Substances of very high concern (SVHC) according to REACH, Article 57 REACH - Pre-registered substances 15.2 Chemical safety assessment:

Substance is not listed.

Substance is not listed.

Substance is listed.
A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information
Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. Department issuing data specification sheet:
Abbreviations and acronyms:

Rio: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods by Rail)
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent

DE/E —

UN1993, FLAMMABLE LIQUID, N.O.S. (Cobalt naphthenate, 53% in mineral spirits), $3,\, III$

DE/E