

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier****Trade name****Nickel(II) octanoate in mineral spirits****Stock number:**

39479

CAS Number:

4995-91-9

Index number:

028-028-00-9

1.2 Relevant identified uses of the substance or mixture and uses advised against.**Identified use:**

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
76185 Karlsruhe / Germany
Tel: +49 (0) 721 84007 280
Fax: +49 (0) 721 84007 300
Email: tech@alfa.com
www.alfa.com
Product safety Tel + +049 (0) 7275 988687-0
Carechem 24: +44 (0) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240

Informing department:**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**

GHS02 flame

Flam. Liq. 3 H226 Flammable liquid and vapour.



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2 H341 Suspected of causing genetic defects.

Carc. 1A H350 May cause cancer.

Repr. 1A H360D May damage the unborn child.

STOT RE 1 H372 Causes damage to the lung, the kidneys and the liver system through prolonged or repeated exposure. Route of exposure: Inhalative.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.



GHS09 environment

Aquatic Acute 1 H400 Very toxic to aquatic life.

Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



GHS07

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

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

T; Toxic

R45-61-48/23: May cause cancer. May cause harm to the unborn child. Toxic: danger of serious damage to health by prolonged exposure through inhalation.



C; Corrosive

R35: Causes severe burns.



Xn; Harmful

R68: Possible risk of irreversible effects.



Xn; Sensitising

R42/43: May cause sensitisation by inhalation and skin contact.



N; Dangerous for the environment

R50/53: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R10: Flammable.

Information concerning particular hazards for human and environment:

Not applicable

Other hazards that do not result in classification

No information known.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008****Hazard pictograms****Signal word****Hazard statements**

The substance is classified and labelled according to the CLP regulation.

GHS02, GHS05, GHS08, GHS09

Danger

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

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

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H350 May cause cancer.

H360D May damage the unborn child.

H372 Causes damage to the lung, the kidneys and the liver system through prolonged or repeated exposure.

Route of exposure: Inhalative.

H410 Very toxic to aquatic life with long lasting effects.

P273 Avoid release to the environment.

P201 Obtain special instructions before use.

P309 IF exposed or if you feel unwell:

P310 Immediately call a POISON CENTER or doctor/physician.

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

Precautionary statements

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

Printing date 01.07.2013

Revision: 23.02.2010

Trade name **Nickel(II) octanoate in mineral spirits**

(Contd. of page 1)

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients**3.1 Substances**

CAS# Designation:

4995-91-9 Nickel(II) octanoate in mineral spirits

Identification number(s):

028-028-00-9

SECTION 4: First aid measures**4.1 Description of first aid measures**

General information

After inhalation

Instantly remove any clothing soiled by the product.
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

After skin contact

Seek immediate medical advice.

After eye contact

Instantly wash with water and soap and rinse thoroughly.

After swallowing

Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Rinse opened eye for several minutes under running water. Then consult doctor.

Danger

Seek medical treatment.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

If swallowed or in case of vomiting, danger of entering the lungs.

No further relevant information available.

SECTION 5: Firefighting measures**5.1 Extinguishing media**

Suitable extinguishing agents

CO₂, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents

Halocarbon extinguisher

5.2 Special hazards arising from the substance or mixtureIf this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Toxic 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

Keep away from ignition sources

6.2 Environmental precautions:

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).

Use neutralizing agent.

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

Open and handle container with care.

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:

No special requirements.

Information about storage in one common storage facility:

Store away from oxidizing agents.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

Store in a locked cabinet or with access restricted to technical experts or their assistants.

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.

Components with critical values that require monitoring at the workplace:

Mineral spirits (stoddard solvent)

ppm

ACGIH TLV 100

Belgium TWA 100

Denmark TWA 100

Ireland TWA 100

Netherlands TWA 100

USA PEL 500

(Contd. on page 3)
DE/E

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 23.02.2010

Trade name **Nickel(II) octanoate in mineral spirits**

(Contd. of page 2)

8.1 Control parameters

Components with critical values that require monitoring at the workplace:

2-Ethylhexanoic acid
mg/m³
ACGIH TLV 5 (inhalable fraction of the aerosol/vapor)

Nickel and inorganic compounds, as Ni
mg/m³
ACGIH TLV 1.5, A5-inhalable particulate (metal)
0.2, A1-inhalable particulate (insoluble compounds)
0.1, A4-inhalable particulate (soluble compounds)
Carcinogen

Austria
Denmark TWA 0.5
Finland TWA 0.1 (skin) Carcinogen
France VME 1; C3-Carcinogen
Germany Carcinogen
Hungary 0.005-STEL; Carcinogen (insoluble compounds)
Japan 1; 2B-Carcinogen
Korea TLV 1.5
Netherlands MAC-TGG 1; Carcinogen
1 (insoluble compounds)
Norway TWA 0.05
Poland TWA 0.25
Russia 0.05-STEL
Sweden NGV 0.5 (dust)
Switzerland MAK-W 0.5; Carcinogen
United Kingdom TWA 0.1
USA PEL 1
No data

Additional information:**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.

Store protective clothing separately.

Avoid contact with the eyes and skin.

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.

Impervious gloves

Not determined

Tightly sealed safety glasses.

Full face protection

Protective work clothing.

Breathing equipment:**Protection of hands:****Material of gloves****Penetration time of glove material****Eye protection:****Body protection:****SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

Liquid

Green

Petroleum-like

Not determined.

Odour threshold:

pH-value: Not determined.

Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: 313-390 °C

Sublimation temperature / start: Not determined

Flash point: 40 °C

Inflammability (solid, gaseous) Not determined.

Ignition temperature: Not determined

Decomposition temperature: Not determined

Self-inflammability: Not determined.

Critical values for explosion:

Lower: Not determined

Upper: Not determined

Steam pressure: Not determined

Density at 20 °C 0.95 g/cm³

Relative density Not determined.

Vapour density Not determined.

Evaporation rate Not determined.

Solubility in / Miscibility with

Water: Not miscible or difficult to mix

Partition coefficient (n-octanol/water): Not determined.

Viscosity:

dynamic: Not determined.

kinematic: Not determined.

9.2 Other information No further relevant information available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No information known.

10.2 Chemical stability

Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

No dangerous reactions known

10.5 Incompatible materials:

Oxidizing agents

Alkali metals

Carbon monoxide and carbon dioxide

Toxic metal oxide smoke

DE/E

(Contd. on page 4)

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

Printing date 01.07.2013

Revision: 23.02.2010

Trade name **Nickel(II) octanoate in mineral spirits**

(Contd. of page 3)

SECTION 11: Toxicological information**11.1 Information on toxicological effects****Acute toxicity:**

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

LD/LC50 values that are relevant for classification:

No data

Skin irritation or corrosion:

Causes severe skin burns.

Eye irritation or corrosion:

Causes serious eye damage.

Sensitization:

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

Suspected of causing genetic defects.

Germ cell mutagenicity:

May cause cancer.

Carcinogenicity:

IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.

NTP-K: Known to be carcinogenic: sufficient evidence from human studies.

May damage fertility or the unborn child.

Reproductive toxicity:**Specific target organ system toxicity - repeated exposure:**

Causes damage to the lung, the kidneys and the liver system through prolonged or repeated exposure. Route of exposure: Inhalative.

Specific target organ system toxicity - single exposure:

No effects known.

Aspiration hazard:

No effects known.

Additional toxicological information:

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**

No further relevant information available.

Aquatic toxicity:

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

12.3 Bioaccumulative potential

No further relevant information available.

12.4 Mobility in soil

No further relevant information available.

Ecotoxicological effects:

Very toxic for fish

Remark:**Additional ecological information:**

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

Water danger class 3 (Self-assessment): extremely hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into soil.

Also poisonous for fish and plankton in water bodies.

May cause long lasting harmful effects to aquatic life.

Avoid transfer into the environment.

Very toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment**PBT:**

Not applicable.

vPvB:

Not applicable.

12.6 Other adverse effects

No further relevant information available.

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.

SECTION 14: Transport information**UN-Number****ADR, IMDG, IATA**

UN1993

14.2 UN proper shipping name**ADR****IMDG**1993 FLAMMABLE LIQUID, N.O.S. (Nickel octoate/mineral spirits)
FLAMMABLE LIQUID, N.O.S. (Nickel octoate/mineral spirits), MARINE
POLLUTANT
FLAMMABLE LIQUID, N.O.S. (Nickel octoate/mineral spirits)**IATA****14.3 Transport hazard class(es)****ADR****Class****Label****IMDG**3 (F1) Flammable liquids.
3**Class****Label****IATA**3 Flammable liquids.
3**Class****Label**3 Flammable liquids.
3**Packing group****ADR, IMDG, IATA**

III

14.5 Environmental hazards:**Marine pollutant:**

Environmentally hazardous substance, liquid; Marine Pollutant

Yes (P)

Symbol (fish and tree)

14.6 Special precautions for user**Kemler Number:**

Warning: Flammable liquids.

30

(Contd. on page 5)

DE/E

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

Printing date 01.07.2013

Revision: 23.02.2010

Trade name **Nickel(II) octanoate in mineral spirits**

(Contd. of page 4)

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):**

E1

Limited quantities (LQ)

5L

Transport category

3

Tunnel restriction code

D/E

UN "Model Regulation":

UN1993, FLAMMABLE LIQUID, N.O.S. (Nickel octoate/mineral spirits), 3, III

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****Australian Inventory of Chemical**

Substance is listed.

Substances**Standard for the Uniform Scheduling of**

Substance is not listed.

Drugs and Poisons**National regulations****Information about limitation of use:**

Workers should not be exposed to this hazardous material. Exceptions can be made by the authorities in certain exceptional cases.

Employment restrictions concerning young persons must be observed.

Employment restrictions concerning women of child-bearing age must be observed.

For use only by technically qualified individuals.

Water hazard class:

Water danger class 3 (Self-assessment): extremely hazardous for water.

Other regulations, limitations and prohibitive**regulations****ELINCS (European List of Notified Chemical**

Substance is not listed.

Substances)**Substances of very high concern (SVHC)**

Substance is not listed.

according to REACH, Article 57

Substance is listed.

REACH - Pre-registered substances**15.2 Chemical safety assessment:**

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: Health, Safety and Environmental Department.**Abbreviations and acronyms:**

RID: 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 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 Air Transport Association

P: Marine Pollutant

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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