

Safety Data Sheet

according to 1907/2006/EC, Article 31

Printing date 13.07.2010

Revision: 13.07.2010

1 Identification of substance

Product details

Trade name

Bis(pentamethylcyclopentadienyl)nickel

Stock number:

39238

Manufacturer/Supplier:

Alfa Aesar GmbH & Co.KG
Benzstrasse 3
D-76185 Karlsruhe / GermanyE-mail: gcat@matthey.com
www.alfa-chemcat.com

Informing department:

Product safety department.

Emergency information:

Giftnotruf Universität Mainz / Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telefon: +49(0)6131/19240

2 Hazards identification

Hazard designation:



T Toxic

Information pertaining to particular dangers
for man and environment
GHS label elements

R 45 May cause cancer.

**Danger**

Prevention:

H350 - May cause cancer.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P281 Use personal protective equipment as required.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

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

Response:

Storage:

Disposal:

3 Composition/information on ingredients

Chemical characterization:

Bis(pentamethylcyclopentadienyl)nickel
(CAS# 74507-63-4): 100%

Designation: (CAS#)

4 First aid measures

After inhalation

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

After skin contact

Seek immediate medical advice.

Instantly wash with water and soap and rinse thoroughly.

After eye contact

Seek immediate medical advice.

After swallowing

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

Seek immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents
Special hazards caused by the material, its
products of combustion or flue gases:CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Can be released in case of fire:

Carbon monoxide and carbon dioxide

Toxic metal oxide smoke

Wear self-contained breathing apparatus.

Wear full protective suit.

Protective equipment:

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

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

Dispose of contaminated material as waste according to item 13.

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

Measures for environmental protection:

Measures for cleaning/collecting:

Additional information:

7 Handling and storage

Handling

Information 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:

Keep ignition sources away - Do not smoke.

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.

8 Exposure controls and 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:Nickel and inorganic compounds, as Ni
mg/m³

ACGIH TLV 1.5; A5 (metal)

0.2; A1 (insoluble compounds)

0.1; A4 (soluble compounds)

Austria Carcinogen

Denmark TWA 0.5

Finland TWA 0.1 (skin) Carcinogen

France VME 1; C3-Carcinogen

Germany Carcinogen

Hungary 0.005-STEL; Carcinogen (insoluble compounds)

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Additional information:

Personal protective equipment

General protective and hygienic measures

Breathing equipment:

Protection of hands:

Material of gloves

Penetration time of glove material

Eye protection:

Body protection:

Japan OEL 1; 2B-Carcinogen

Korea TLV 1.5

Netherlands MAC-TGG 1; Carcinogen
1 (insoluble compounds)

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

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.

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

Safety glasses

Protective work clothing.

9 Physical and chemical properties:**General Information**

Form: Crystalline

Smell: Not determined

Change in condition

Melting point/Melting range: Not determined

Boiling point/Boiling range: Not determined

Sublimation temperature / start: Not determined

Flash point: Not applicable

Ignition temperature: Not determined

Decomposition temperature: Not determined

Danger of explosion: Product is not explosive.

Critical values for explosion:

Lower: Not determined

Upper: Not determined

Steam pressure: Not determined

Density: Not determined

10 Stability and reactivity

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

Materials to be avoided: Oxidizing agents

Dangerous reactions: No dangerous reactions known

Dangerous products of decomposition: Carbon monoxide and carbon dioxide
Toxic metal oxide smoke

11 Toxicological information

Acute toxicity:

Primary irritant effect:

on the skin: Irritant for skin and mucous membranes.

on the eye: Irritant effect.

Sensitization: No sensitizing effect known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity.
NTP-1: Known to be carcinogenic: sufficient evidence from human studies.

12 Ecological information:

Additional ecological information:

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

13 Disposal considerations

Product:

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.

14 Transport information

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: None

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: None

Marine pollutant: No

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

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Transport/Additional information: Not dangerous according to the above specifications.

15 Regulatory information**Designation according to EC guidelines:****Code letter and hazard designation of product:**

T Toxic

Risk phrases:

45 May cause cancer.

Safety phrases:

53 Avoid exposure - obtain special instructions before use.

20 When using do not eat or drink.

36 Wear suitable protective clothing.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

National regulations**Information about limitation of use:**

For use only by technically qualified individuals.

Employment restrictions concerning young persons must be observed.

Water hazard class:

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

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.**Contact:** Zachariah Holt**Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 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)
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

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