

Safety Data Sheet
according to 1907/2006/EC, Article 31

Revision: 13.07.2010

Printing date 13.07.2010

1 Identification of substance**Product details**

Trade name

Lanthanum Nickel eutectic pieces

Stock number:

13399

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
F Highly flammable

Information pertaining to particular dangers for man and environment

R 45 May cause cancer.
R 11 Highly flammable.
R 40 Limited evidence of a carcinogenic effect.
R 43 May cause sensitisation by skin contact.

GHS label elements

**Danger**

H350 - May cause cancer.

**Warning**

H228 - Flammable solid.

**Warning**

H317 - May cause an allergic skin reaction.

Prevention:

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Response:

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P321 Specific treatment (see on this label).

Storage:

P405 Store locked up.

Disposal:

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

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#)

Lanthanum (CAS# 7439-91-0), 88%
Nickel (CAS# 7440-02-0), 12%**4 First aid measures**

After inhalation

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

After skin contact

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 powder for metal fires. Do not use water.

For safety reasons unsuitable extinguishing agents

Water.

Carbon dioxide

Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection:

Ensure adequate ventilation

Keep away from ignition sources

Measures for cleaning/collecting:

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

Dispose of contaminated material as waste according to item 13.

Ensure adequate ventilation.

Keep away from ignition sources.

Additional information:

See Section 7 for information on safe handling

See section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

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.

Prevent formation of dust.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Fumes can combine with air to form an explosive mixture.

Storage

Requirements to be met by storerooms and containers:

Store in cool location.

Information about storage in one common storage facility:

Do not store together with oxidizing and acidic materials.

Store away from halogens.

Further information about storage conditions:

Store under dry inert gas.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

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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

ACGIH TLV 1.5, A5-inhalable particulate (metal)
0.2, A1-inhalable particulate (insoluble compounds)
0.1, A4-inhalable particulate (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)

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:**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.

Breathing equipment:

Use breathing protection with high concentrations.

Eye protection:

Safety glasses

Body protection:

Face protection

Protective work clothing.

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

Form: Chunks
Colour: Gold coloured
Smell: Odourless

Change in condition**Melting point/Melting range:** 480°C**Boiling point/Boiling range:** Not determined**Sublimation temperature / start:** Not determined**Flash point:**

Not applicable

Inflammability (solid, gaseous)

Highly flammable.

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

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:

Acids

Oxidizing agents

Halogens

Dangerous reactions:

Contact with acids releases flammable gases

Dangerous products of decomposition:

Metal oxide

11 Toxicological information**Acute toxicity:****Primary irritant effect:****on the skin:****on the eye:****Sensitization:****Additional toxicological information:**

Irritant for skin and mucous membranes.

Irritant effect.

Sensitization possible by skin contact.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

EPA-A: human carcinogen: sufficient evidence from epidemiologic studies to support a causal association between exposure and cancer.

IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals.

NTP-2: Reasonably anticipated to be a carcinogen: limited evidence from studies in humans or sufficient evidence from studies in experimental animals.

ACGIH A5: Not suspected as a human carcinogen: Not suspected as a human carcinogen on the basis of properly conducted epidemiologic studies in humans. Studies have sufficiently long follow-up, reliable exposure histories, sufficiently high dose, and adequate statistical power to conclude that exposure to the agent does not convey a significant risk of cancer to humans. Evidence suggesting a lack of carcinogenicity in experimental animals will be considered if it is supported by other relevant data.

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Sensitisation May cause sensitisation by skin contact.

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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**

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

**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: 4.1 (F3) Flammable solids, self-reactive substances and solid desensitised explosives.
Kemler Number: 40
UN-Number: 3178
Packaging group: III
Label: 4.1
Designation of goods: 3178 FLAMMABLE SOLID, INORGANIC, N.O.S. (lanthanum nickel eutectic)
Limited quantities (LQ): LQ9
Transport category: 3
Tunnel restriction code: E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 4.1
UN Number: 3178
Label: 4.1
Packaging group: III
Marine pollutant: No
Correct technical name: FLAMMABLE SOLID, INORGANIC, N.O.S. (lanthanum nickel eutectic)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 4.1
UN/ID Number: 3178
Label: 4.1
Packaging group: III
Correct technical name: FLAMMABLE SOLID, INORGANIC, N.O.S. (lanthanum nickel eutectic)

UN "Model Regulation":

UN3178, FLAMMABLE SOLID, INORGANIC, N.O.S., 4.1, III

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

T Toxic
F Highly flammable

Risk phrases:

45 May cause cancer.
11 Highly flammable.
40 Limited evidence of a carcinogenic effect.
43 May cause sensitisation by skin contact.

Safety phrases:

22 Do not breathe dust.
36 Wear suitable protective clothing.

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

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

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)