

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 01.07.2013

Revision: 03.10.2011

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**

Trade name

Nickel Aluminum, Raney type non-activated

Stock number:

87676

CAS Number:

12635-29-9

EC number:

234-439-6

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. Sol. 1 H228 Flammable solid.

Water-react. 2 H261 In contact with water releases flammable gases.



GHS08 health hazard

Carc. 2 H351 Suspected of causing cancer.



GHS07

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: Limited evidence of a carcinogenic effect.

Xi; Sensitising

R43: May cause sensitisation by skin contact.

F; Highly flammable

R11-15: Highly flammable. Contact with water liberates extremely flammable gases.

Carc. Cat. 3

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, GHS07, GHS08

Danger

H228 Flammable solid.

H261 In contact with water releases flammable gases.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

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

P231+P232 Handle under inert gas. Protect from moisture.

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

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

P405 Store locked up.

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

Precautionary statements**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:

12635-29-9 Nickel Aluminum, Raney type non-activated

Identification number(s):

EC number:

234-439-6

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.

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.

4.2 Most important symptoms and effects, both acute and delayed

Seek medical treatment.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

No further relevant information available.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
Suitable extinguishing agents
For safety reasons unsuitable extinguishing agents
- Special powder for metal fires. Do not use water.
Water.
- 5.2 Special hazards arising from the substance or mixture**
- If this product is involved in a fire, the following can be released:
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.
Dispose of contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents.
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**
- Handle under dry protective gas.
Keep containers tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation/exhaustion at the workplace.
Reacts violently with water
- Information about protection against explosions and fires:**
- Protect against electrostatic charges.
- 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:
- Store in cool location.
Do not store together with oxidizing and acidic materials.
Store away from air.
Store away from water.
- Further information about storage conditions:**
- Store under dry inert gas.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from humidity and keep away from water.
No further relevant information available.
- 7.3 Specific end use(s)**

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:
Additional information:
- Not required.
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.
Impervious gloves
Not determined
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:
- Form:** Powder
Colour: Black
Smell: Not determined
Odour threshold: Not determined.
- pH-value:** Not applicable.
- Change in condition**
Melting point/Melting range: 1133-1330 °C
Boiling point/Boiling range: Not determined

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| | |
|---|--|
| Sublimation temperature / start: | Not determined |
| Inflammability (solid, gaseous) | Highly flammable. Contact with water liberates extremely flammable gases. |
| Ignition temperature: | Not determined |
| Decomposition temperature: | Not determined |
| Self-inflammability: | Not determined. |
| Critical values for explosion: | |
| Lower: | 1,4 g/m ³ |
| Upper: | Not determined |
| Steam pressure: | Not applicable. |
| Density | Not determined |
| Relative density | Not determined. |
| Vapour density | Not applicable. |
| Evaporation rate | Not applicable. |
| Solubility in / Miscibility with | |
| Water: | Contact with water releases flammable gases |
| Partition coefficient (n-octanol/water): | Not determined. |
| Viscosity: | |
| dynamic: | Not applicable. |
| kinematic: | Not applicable. |
| 9.2 Other information | No further relevant information available. |

SECTION 10: Stability and reactivity

| | |
|--|--|
| 10.1 Reactivity | In contact with water releases flammable gases which may ignite spontaneously. |
| 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 | Contact with water releases flammable gases |
| 10.5 Incompatible materials: | Oxidizing agents Air Water/moisture |
| 10.6 Hazardous decomposition products: | 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: | No data |
| Skin irritation or corrosion: | May cause irritation |
| Eye irritation or corrosion: | Irritant effect. |
| Sensitization: | May cause an allergic skin reaction. |
| Germ cell mutagenicity: | No effects known. |
| Carcinogenicity: | Suspected of causing cancer. IARC-2B: Possibly carcinogenic to humans: limited evidence in humans in the absence of sufficient evidence in experimental animals. No effects known. |
| Reproductive toxicity: | |
| Specific target organ system toxicity - repeated exposure: | No effects known. |
| 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 | |
| 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. |
| Additional ecological information: | |
| General notes: | 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 | |
| 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 | UN3208 |
| 14.2 UN proper shipping name | |
| ADR | 3208 METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Nickel Aluminum, Raney type non-activated) |
| IMDG, IATA | METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Nickel Aluminum, Raney type non-activated) |

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14.3 Transport hazard class(es)

ADR

Class
Label
IMDG, IATA

4.3 (W2) Substances which, in contact with water, emit flammable gases.

4.3

Class
Label

4.3 Substances which, in contact with water, emit flammable gases.

4.3

Packing group
ADR, IMDG, IATA

II

14.5 Environmental hazards:

Not applicable.

14.6 Special precautions for user

Kemler Number:

Warning: Substances which, in contact with water, emit flammable gases.

EMS Number:

423
F-G,S-N**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):

E2

Limited quantities (LQ)

500 g

Transport category

2

Tunnel restriction code

D/E

UN "Model Regulation":

UN3208, METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. (Nickel Aluminum, Raney type non-activated), 4.3, II

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

Australian Inventory of Chemical

Substances is listed.

Substances

Standard for the Uniform Scheduling of

Substances is not listed.

Drugs and Poisons

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

Other regulations, limitations and prohibitive

regulations

ELINCS (European List of Notified Chemical

Substances) is not listed.

Substances of very high concern (SVHC)

Substance is not listed.

according to REACH, Article 57

REACH - Pre-registered substances

Substance is not listed.

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)

ICAO: International Civil Aviation Organization

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

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

LD50: Lethal dose, 50 percent

DE/E