E-mail: gcat@matthey.com www.alfa-chemcat.com

Printing date 14.07.2010 Revision: 14.07.2010

1 Identification of substance

**Product details** 

Trade name Sponge Nickel, A-7000, promoted with 2% Molybdenum

Stock number:

Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

Informing department: Emergency information:

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

2 Hazards identification

Manufacturer/Supplier:

Hazard designation:

Xn Harmful F Highly flammable

Information pertaining to particular dangers for man and environment

**GHS** label elements

11 Highly flammable.

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

Danger

H228 - Flammable solid. H251 - Self-heating: may catch fire.

Warning

H351 - Suspected of causing cancer.

Warning

Prevention:

H317 - May cause an allergic skin reaction.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
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).

P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations. Storage: Disposal:

3 Composition/information on ingredients

Chemical characterization: Designation: (CAS#)

Response:

Nickel (CAS# 7440-02-0): 85-90% Aluminum (CAS# 7429-90-5): 7-12% Molybdenum ( CAS# 7439-98-7): 1-3% Water (CAS# 7732-18-5): Balance

4 First aid measures

After skin contact After eye contact After swallowing

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.
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 immediate medical advice.

5 Fire fighting measures

Suitable extinguishing agents For safety reasons unsuitable extinguishing

agents
Special hazards caused by the material, its products of combustion or flue gases:

Protective equipment:

Special powder for metal fires. Do not use water.

Can be released in case of fire:

Toxic metal oxide smoke
Wear self-contained breathing apparatus. Wear full protective suit.

6 Accidental release measures

Person-related safety precautions:

Measures for environmental protection: Measures for cleaning/collecting:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation
Keep away from ignition sources
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.
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

Additional information:

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.

Information about protection against

explosions and fires:

Keep ignition sources away - Do not smoke. Protect against electrostatic charges.

Storage Requirements to be met by storerooms and containers:

storage facility:

Information about storage in one common

Further information about storage

conditions:

Store in cool location.

Store away from oxidizing agents. Store away from air.

Keep container tightly sealed.

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Store in cool, dry conditions in well sealed containers.

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### 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:

Molybdenum and compounds (as Mo)

ACGIH TLV 10(Mo) Austria MAK
Denmark TWA
Finland TWA
Germany MAK
Korea TLV 15(Mo) 10(Mo)

Denmark TWA Finland TWA 5(Mo) 5(Mo) 15(Mo) 15(Mo) 15(Mo) 10(Mo) 1

Nickel and inorganic compounds, as Ni mg/m3 ACGIH TLV 1.5; A5 (metal)

mg/m3
/ 1.5; A5 (metal)
0.2; A1 (insoluble compounds)
0.1; A4 (soluble compounds)
Carcinogen
WA 0.5
A 0.1 (skin) Carcinogen
E 1; C3-Carcinogen Denmark TWA Finland TWA France VME

Carcinogen
0.005-STEL; Carcinogen (insoluble compounds)

Germany Hungary Japan OEL Korea TLV 1; 2B-Carcinogen Netherlands MAC-TGG 1; Carcinogen Neureriands MAC-1 GG 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

Additional information:

Eye protection:

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.

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

Austria

No data

varies from manufacturer to manufacturer. Safety glasses Face protection

Face protection
Protective work clothing. **Body protection:** 

#### 9 Physical and chemical properties.

9 Priysical and Chemical properties.	
General Information	
Form:	Suspension In water
Smell:	Odourless
Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:	1133-1330°C Not determined Not determined
Flash point:	Not applicable
Inflammability (solid, gaseous)	Highly flammable.
Ignition temperature:	Not determined
Decomposition temperature:	Not determined
Critical values for explosion: Lower: Upper:	Not determined Not determined
Steam pressure:	Not determined
Density	Not determined
Solubility in / Miscibility with Water:	Insoluble

## 10 Stability and reactivity

Thermal decomposition / conditions to be

avoided: Materials to be avoided:

No decomposition if used and stored according to specifications. Oxidizing agents Air

No dangerous reactions known

Dangerous reactions: Dangerous products of decomposition: Toxic metal oxide smoke

## 11 Toxicological information

Acute toxicity: Primary irritant effect: on the skin: Irritant for skin and mucous membranes

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on the eye: Sensitization: Irritant effect

Additional toxicological information:

Sensitization possible by skin contact.

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

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.

May cause sensitisation by skin contact.

Sensitisation

## 12 Ecological information:

Additional ecological information: General notes:

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

## 13 Disposal considerations

Product:

Consult state, local or national regulations for proper disposal. Hand over to disposers of hazardous waste. Recommendation

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: 4.2 (S4) Substances liable to spontaneous combustion.

40 1378 Kemler Number: **UN-Number:** Packaging group:

Label

4.2 1378 METAL CATALYST, WETTED (Sponge Nickel, A-7063, promoted with 1% Molybdenum)

Designation of goods: Limited quantities (LQ) Transport category LQ0 2 **Tunnel restriction code** D/E

## Maritime transport IMDG/GGVSea:



IMDG/GGVSea Class: **UN Number:** Label Packaging group: Marine pollutant:

Correct technical name: METAL CATALYST, WETTED

## Air transport ICAO-TI and IATA-DGR:



ICAO/IATA Class: UN/ID Number: 4.2 1378

Packaging group: Correct technical name: METAL CATALYST, WETTED

**UN "Model Regulation":** 

#### UN1378, METAL CATALYST, WETTED, 4.2, II

## 15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

product:



Xn Harmful F Highly fl Highly flammable

Risk phrases:

11 Highly flammable.

40 Limited evidence of a carcinogenic effect. 43 May cause sensitisation by skin contact. 36/37 Wear suitable protective clothing and gloves.

Safety phrases:

**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 hazard class 1 (Self-assessment): slightly 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. Zachariah Holt

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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)
RIDG: 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)

GB