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

Printing date 11.08.2010 Revision: 11.08.2010

1 Identification of substance

**Product details** 

4-Cyano-3-(trimethylsilyl)pyridine Trade name

Stock number:

Manufacturer/Supplier: Alfa Aesar GmbH & Co.KG Benzstrasse 3

D-76185 Karlsruhe / Germany

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:

Xn Harmful

Information pertaining to particular dangers

for man and environment

**GHS** label elements

Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

Warning

H302 - Harmful if swallowed.

Prevention:

Response:

Specific treatment (see on this label).

P405 Store locked up.

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

3 Composition/information on ingredients

Chemical characterization:

Designation: (CAS#) 4-Cyano-3-(trimethylsilyl)pyridine (CAS# 17379-38-3): 100%

4 First aid measures

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. Seek immediate medical advice. After inhalation

After skin contact 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. After eye contact After swallowing

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 Nitrogen oxides (NOx)

Silicon oxide

Hydrogen cyanide (HCN)
Wear self-contained breathing apparatus. Protective equipment: Wear full protective suit.

6 Accidental release measures

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Person-related safety precautions:

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits. Measures for cleaning/collecting: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to item 13.

Additional information:

Ensure adequate ventilation.
See Section 7 for information on safe handling

See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

Keep ignition sources away - Do not smoke.

7 Handling and storage

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:

Requirements to be met by storerooms and

containers: Information about storage in one common

storage facility:

Further information about storage conditions:

No special requirements.

Store away from oxidizing agents.

Keep container tightly sealed. 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: Additional information:

Not required. No data

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.
Avoid contact with the eyes and skin.
Use breathing protection with high concentrations.
Check protective gloves prior to each use for their proper condition.

Breathing equipment: Protection of hands:

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. Material of gloves

Penetration time of glove material Eye protection:

Impervious gloves Not determined Safety glasses

**Body protection:** 

Face protection Protective work clothing.

#### 9 Physical and chemical properties:

General	Information

Liquid Yellow Form: Colour: Smell: Not determined

Change in condition Melting point/Melting range: Boiling point/Boiling range: Not determined Not determined Sublimation temperature / start: Not determined Flash point: Not determined

Ignition temperature: Not determined Decomposition temperature: Not determined

Danger of explosion: Product is not explosive.

Critical values for explosion:

ower: Not determined Upper: Not determined Steam pressure: Not determined Density Not determined

### 10 Stability and reactivity

Thermal decomposition / conditions to be

avoided:

Materials to be avoided:

Dangerous reactions: Dangerous products of decomposition:

No decomposition if used and stored according to specifications.

Oxidizing agents

No dangerous reactions known
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)
Silicon oxide
Hydrogen cyanide (prussic acid)

# 11 Toxicological information

Acute toxicity: Primary irritant effect:

on the skin:

on the eye: Sensitization: Irritant for skin and mucous membranes.

Additional toxicological information:

No sensitizing effect known.
To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.
No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

#### 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: 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.

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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:

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

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

#### 15 Regulatory information

Designation according to EC guidelines:

Code letter and hazard designation of

Xn Harmful

Risk phrases: Harmful if swallowed.

36/37/38 Irritating to eyes, respiratory system and skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 36/37 Wear suitable protective clothing and gloves. Safety phrases:

**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.

#### 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.

Conformance with this Material Safety Data Sheet, of in combination with any other product of process, is the responsibility of the described for the described formance with this Material Safety Data Sheet, or in combination with any other product of process, is the responsibility of the described formance.

Health, Safety and Environmental Department.

Zachariah Holt

Abbreviations and acronyms:

Appearance with this Material Safety Data Sheet, or in combination sheet:

Health, Safety and Environmental Department.

Zachariah Holt

Appearance with this Material Safety Data Sheet;

Appearance with this Material Safety Data Sheet;

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Health, Safety and Environmental Department.

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Appearance with this Health, Safety and Environmental Department.

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Appearance with eligible of the International Carriage of Dangerous Goods Paail)

INDS: International Concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport Of Dangerous Goods Paail)

INDS: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAC: International Civil Aviation Organization

ICAC-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)