Safety data sheet according to 1907/2006/EC, Article 31

Printing date 01.07.2013 Revision: 11.12.2006

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

1.1 Product identified
Trade name
Stock number:
CAS Number:
CAS Number:
1.2 Relevant identified uses of the substance or mixture and uses advised against.
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

Informing department:

www.ana.com
Product safety Tel + +049 (0) 7275 988687-0
Carechem 24: +44 (o) 1235 239 670 (Multi-language emergency number)
Poison Information Center Mainz
www.giftinfo.uni-mainz.de Telephone: +49(0)6131/19240 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

GHS06 skull and crossbones

Acute Tox. 2 H300 Fatal if swallowed.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

💹 T+; Very toxic

R28: Very toxic if swallowed.

Information concerning particular hazards

for human and environment: Other hazards that do not result in classification

No information known.

Not applicable

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation. GHS06

Hazard pictograms Signal word Hazard statements

Danger H300 Fatal if swallowed.

Precautionary statements

P264 Wash thoroughly after handling.
P270 Do no eat, drink or smoke when using this product.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P321 Specific treatment (see on this label).
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards Results of PBT and vPvB assessment

PBT:

Not applicable. Not applicable. vPvB:

SECTION 3: Composition/information on ingredients

3.1 Substances CAS# Designation: 57-87-4 Ergosterol

SECTION 4: First aid measures

4.1 Description of first aid measures General information

After inhalation

Instantly remove any clothing soiled by the product. In case of irregular breathing or respiratory arrest provide artificial respiration. Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms

persist. Seek immediate medical advice.

After skin contact After eye contact

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.
Do not induce vomiting; instantly call for medical help.

After syallowing
4.2 Most important symptoms and effects,
both acute and delayed
4.3 Indication of any immediate medical
attention and special treatment needed

No further relevant information available No further relevant information available

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing agents

Use carbon dioxide, extinguishing powder or foam. Water may be ineffective but may be used for cooling

exposed containers. .2 Special hazards arising from the

substance or mixture

If this product is involved in a fire, the following can be released: Carbon monoxide and carbon dioxide

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

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:
Prevention of secondary hazards: 6.4 Reference to other sections

6.2 Environmental precautions:

Dispose of contaminated material as waste according to item 13.

No special measures required.
See Section 7 for information on safe handling
See section 8 for information on personal protection equipment.

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Trade name *Ergosterol*

See Section 13 for information on disposal

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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.

Information about protection against

No information known. explosions and fires: 7.2 Conditions for safe storage, including any incompatibilities

Requirements to be met by storerooms and

Information about storage in one common storage facility:

No special requirements.

Store away from oxidizing agents. Store away from air. Store in the dark.

Further information about storage

conditions:

Store under dry inert gas.
This product is air sensitive.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Protect from the effects of light.
Store in a locked cabinet or with access restricted to technical experts or their assistants. 7.3 Specific end use(s)

No further relevant information available.

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.

Breathing equipment: Protection of hands:

Impervious gloves

Material of gloves Penetration time of glove material Eye protection:

Body protection:

Not determined Safety glasses
Protective work clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information Appearance: Form:

Form: Smell: Odour threshold:

Not determined Not determined Not applicable.

Powder

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 156-158 °C Not determined Not determined

Flash point:

pH-value:

Not applicable Not determined Inflammability (solid, gaseous) Inflammability (solid, gaseous) Ignition temperature: Decomposition temperature: Self-inflammability: Not determined Not determined Not determined

Danger of explosion: Critical values for explosion:

Not determined Upper: Steam pressure: Not determined Not applicable. Density Not determined Relative density Not determined. Vapour density Evaporation rate Not applicable. Not applicable. Solubility in / Miscibility with Not determined

Water:
Partition coefficient (n-octanol/water):

Viscosity: dynamic: kinematic:

Not determined.

Product is not explosive.

9.2 Other information

Not applicable. Not applicable. No further relevant information available

No information known.

SECTION 10: Stability and reactivity

10.1 Reactivity
10.2 Chemical stability
Thermal decomposition / conditions to be avoided:
10.3 Possibility of hazardous reactions
10.5 Incompatible materials:

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications. No dangerous reactions known

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Oxidizing agents

Fatal if swallowed.

No sensitizing effect known. No effects known.

No data

Irritant effect.

Light
Carbon monoxide and carbon dioxide 10.6 Hazardous decomposition products:

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD/LC50 values that are relevant for

classification: Skin irritation or corrosion:

Eye irritation or corrosion: Sensitization:

Germ cell mutagenicity:

Carcinogenicity:

Reproductive toxicity: Specific target organ system toxicity -repeated exposure:

Specific target organ system toxicity - single

exposure:

Aspiration hazard:

Additional toxicological information:

No effects known. No effects known.

No effects known. No effects 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.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential

12.4 Mobility in soil
Additional ecological information:

General notes:

No further relevant information available. No further relevant information available. No further relevant information available.

Irritant for skin and mucous membranes.

No further relevant information available

Do not allow material to be released to the environment without proper governmental permits. Water hazard class 2 (Self-assessment): hazardous for water.

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil. Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment PBT:

vPvB:

12.6 Other adverse effects

Not applicable. Not applicable. 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.

UN2811

Uncleaned packagings:

Recommendation

Disposal must be made according to official regulations.

SECTION 14: Transport information **UN-Number**

ADR, IMDG, IATA

14.2 UN proper shipping name IMDG, IATA

2811 TOXIC SOLID, ORGANIC, N.O.S. (Ergosterol) TOXIC SOLID, ORGANIC, N.O.S. (Ergosterol)

14.3 Transport hazard class(es)

ADR

Class

Label IMDG, IATA 6.1 (T2) Toxic substances.

Class 6.1 Toxic substances. Label 6.1

Packing group ADR, IMDG, IATA

14.5 Environmental hazards: Not applicable.

14.6 Special precautions for user Warning: Toxic substances. Kemler Number:

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): Limited quantities (LQ) Transport category Tunnel restriction code

D/E UN "Model Regulation": UN2811, TOXIC SOLID, ORGANIC, N.O.S. (Ergosterol), 6.1, II

LQ18

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Australian Inventory of Chemical Substances

Substance is not listed.

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Trade name *Ergosterol*

Standard for the Uniform Scheduling of

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 2 (Self-assessment): hazardous for water. Other regulations, limitations and prohibitive regulations ELINCS (European List of Notified Chemical

Substances)
Substances of very high concern (SVHC)
according to REACH, Article 57
REACH - Pre-registered substances
15.2 Chemical safety assessment:

Substance is not listed. Substance is not listed. Substance is listed.

Substance is not listed.

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:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDE: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Hamonized System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

DE/E