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

Printing date 01.07.2013 Revision: 03.07.2009

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

1.1 Product identifier

Magnesium stearate

Trade name Stock number: CAS Number: ELINCS Number: A16244 557-04-0 448-690-6 Index number 607-691-00-3

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 Informing department:

1.4 Emergency telephone number:

www.arra.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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 4 H413 May cause long lasting harmful effects to aquatic life.

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

R53: May cause long-term adverse effects in the aquatic environment. 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

The substance is classified and labelled according to the CLP regulation. Hazard pictograms Signal word Hazard statements Precautionary statements Not applicable Not applicable
Not applicable
H413 May cause long lasting harmful effects to aquatic life.
P273 Avoid release to the environment.

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

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: vPvB: Not applicable. Not applicable.

SECTION 3: Composition/information on ingredients

3.1 Substances CAS# Designation: Identification number(s): 557-04-0 Magnesium stearate

448-690-6 607-691-00-3 **ELINCS Number:** Index number:

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. Seek immediate medical advice

Seek medical tréatment.

Instantly wash with water and soap and rinse thoroughly. Seek immediate medical advice. After skin contact

Rinse opened eye for several minutes under running water. Then consult doctor. After eye contact

After swallowing
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 5.2 Special hazards arising from the substance or mixture

Use fire fighting measures that suit the environment.

If this product is involved in a fire, the following can be released:

Carbon monoxide and carbon dioxide

Metal oxide

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. 6.2 Environmental precautions:

6.3 Methods and material for containment

and cleaning up: Prevention of secondary hazards: Collect mechanically. 6.4 Reference to other sections

No special measures required.
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 Keep containers tightly sealed.

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Store in cool, dry place in tightly closed containers. Ensure good ventilation/exhaustion at the workplace.

Information about protection against explosions and fires:

The product is not flammable

7.2 Conditions for safe storage, including any incompatibilities

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. 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.

7.3 Specific end use(s)

8.1 Control parameters
Components with critical values that require

monitoring at the workplace:

Stearates

mg/m3 10 ACGIH TLV 10 Ireland TWA

Netherlands TWA No data

Additional information: 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.

Breathing equipment: Protection of hands:

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

Material of gloves Penetration time of glove material Eve protection: Safety glasses Protective work clothing. Body protection:

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance: Form: Colour: Powder White Odourless Smell: Odour threshold: Not determined. pH-value: Not applicable.

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: 148-152 °C Not determined Not determined

Flash point:

Not applicable Product is not inflammable. Inflammability (solid, gaseous) Ignition temperature:
Decomposition temperature: Not determined Not determined

Self-inflammability:

Danger of explosion: Critical values for explosion: Product is not explosive.

Lower: Upper: Steam pressure: Density Relative density

Not determined Not applicable. Not determined Not determined. Not applicable. Not applicable.

Not determined.

Not determined

Vapour density
Evaporation rate
Solubility in / Miscibility with
Water at 20 °C:
Partition coefficient (n-octanol/water):

0,04 g/l Not determined. Viscosity: Not applicable. Not applicable. dvnamic

kinematic 9.2 Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be

10.3 Possibility of hazardous reactions 10.5 Incompatible materials: 10.6 Hazardous decomposition products: No information known.

Stable under recommended storage conditions.

No decomposition if used and stored according to specifications.

No dangerous reactions known Oxidizing agents Carbon monoxide and carbon dioxide Metal oxide

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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:

No data May cause irritation May cause irritation
May cause irritation
No sensitizing effect known.
No effects known.
ACGIH A4: Not classifiable as a human carcinogen: Inadequate data on which to classify the agent in terms of

No effects known.

Germ cell mutagenicity: Carcinogenicity:

its carcinogenicity in humans and/or animals. No effects known.

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.

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

12.1 TOXICITY
Aquatic toxicity:
12.2 Persistence and degradability
12.3 Bioaccumulative potential
12.4 Mobility in soil
Additional ecological information: No further relevant information available. No further relevant information available. No further relevant information available. No further relevant information available

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. May cause long lasting harmful effects to aquatic life. Avoid transfer into the environment.

12.5 Results of PBT and vPvB assessment PBT:

vPvB:

Not applicable.

Not applicable.
No further relevant information available. 12.6 Other adverse effects

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.

None

None

None

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 ADR, IMDG, IATA

14.3 Transport hazard class(es)

ADR, IMDG, IATA

Class

Packing group ADR, IMDG, IATA None Not applicable.

14.5 Environmental hazards: 14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Transport/Additional information:

Not applicable.

Not applicable.

Not dangerous according to the above specifications.

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 listed.

Standard for the Uniform Scheduling of Drugs and Poisons National regulations

Substance is not listed.

Information about limitation of use:

For use only by technically qualified individuals.

Water hazard class:

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

Other regulations, limitations and prohibitive

Although this chemical may sometimes be used as a food or drug or cosmetic, our products are not approved or suitable for such use or for human consumption.

regulations

ELINCS (European List of Notified Chemical 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.

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other informationEmployers 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:

Health, Safety and Environmental Department.

RID: Reglement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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)

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Trade name *Magnesium stearate* ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriagé 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