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

Printing date 02.07.2013 Revision: 06.11.2012

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

1.1 Product identifier

LH-RH, human Trade name

Stock number:

CAS Number:
71447-49-9
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

GHS08 health hazard

Repr. 1A H360 May damage fertility or the unborn child.

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

💹 T; Toxic

R60: May impair fertility. Information concerning particular hazards

for human and environment: 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 GHS08

Signal word Hazard statements

Danger H360 May damage fertility or the unborn child.

Precautionary statements P281 P201

Use personal protective equipment as required. Obtain special instructions before use.

P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P308+P313 IF exposed or concerned: Get medical advice/attention.
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: 71447-49-9 Glp-His-Trp-Ser-Tyr-Gly-Leu-Arg-Pro-Gly-NH2

Not applicable

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.

CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

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

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

Carbon monoxide and carbon dioxide Nitrogen oxides (NOx)

Seek medical treatment.

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:
6.4 Reference to other sections

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.
See Section 13 for information on disposal.

Printing date 02.07.2013 Revision: 06.11.2012

Trade name *LH-RH, human*

(Contd. of page 1)

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep containers tightly sealed. Ensure good ventilation/exhaustion at the workplace. Open and handle container with care.

Information about protection against

explosions and fires:

No information known.

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 freezer (-20°C).

Protect from heat. Store away from oxidizing agents.

Further information about storage

conditions:

Store in freezer (-20°C).
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Store in a locked cabinet or with access restricted to technical experts or their assistants.

No further relevant information available.

SECTION 8: Exposure controls/personal protection

Additional information about design of

technical systems:

7.3 Specific end use(s)

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:

The product does not contain any relevant quantities of materials with critical values that have to be monitored

at the workplace. 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.

Breathing equipment: Protection of hands:

Wash halids duling bleas and at the end of the work.

Store protective clothing separately.

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.

Material of gloves Impervious gloves Penetration time of glove material Not determined Eye 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: Smell:

Powder White to off-white Not determined Odour threshold: Not determined Not applicable. pH-value:

Change in condition

Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start: Not determined Not determined Not determined Inflammability (solid, gaseous)
Ignition temperature:
Decomposition temperature:
Self-inflammability:
Critical values for explosion: Not determined. Not determined Not determined Not determined.

Lower: Upper: Steam pressure: Not determined Not determined Not applicable. Density Relative density Not determined Not determined. Vapour density Evaporation rate Not applicable. Not applicable. Solubility in / Miscibility with
Water:
Partition coefficient (n-octanol/water): Not determined

Viscosity:

dvnamic:

Not applicable. Not applicable. kinematic:

9.2 Other information No further relevant information available

SECTION 10: Stability and reactivity

No information known. Stable under recommended storage conditions.

10.1 Reactivity 10.2 Chemical stability Thermal decomposition / conditions to be

No decomposition if used and stored according to specifications. Reacts with strong oxidizing agents Oxidizing agents

avoided: 10.3 Possibility of hazardous reactions 10.5 Incompatible materials:

Not determined.

10.6 Hazardous decomposition products:

Heat
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOx)

(Contd. of page 2)

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

Printing date 02.07.2013 Revision: 06.11.2012

Trade name *LH-RH, human*

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity:

The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for components in

LD/LC50 values that are relevant for

classification:

No data May cause irritation May cause irritation Skin irritation or corrosion: Eye irritation or corrosion: Sénsitization:

Germ cell mutagenicity: Carcinogenicity:

No sensitizing effect known. No effects known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA

Reproductive toxicity:

May damage fertility or the unborn child.
The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for components in this product.

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
Aquatic toxicity:
12.2 Persistence and degradability 12.3 Bioaccumulative potential 12.4 Mobility in soil 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.

No further relevant information available No further relevant information available.

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

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.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

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

ADR, ADN, IMDG, IATA

14.2 UN proper shipping name ADR, ADN, IMDG, IATA

14.3 Transport hazard class(es)

ADR, ADN, IMDG, IATA Class

Packing group ADR, IMDG, IATA

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

UN "Model Regulation":

Water hazard class:

Not applicable

Not applicable

Not applicable

Not applicable Not applicable

Not applicable.

Not applicable.

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.

Standard for the Uniform Scheduling of

Drugs and Poisons National regulations

Information about limitation of use:

Substance is not listed.

For use only by technically qualified individuals. Employment restrictions concerning young persons must be observed.

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

Other regulations, limitations and prohibitive 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 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)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

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

LC50: Lethal concernation, 50 percent

LD50: Lethal dose, 50 percent