According to 1907/2006/ EEC/ Article 31

Printing date 02.05.2012 Revision: 02.05.2012

Version number 12

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

· Product identifier

· Trade name: L-Acetylglutathione Acetyl-I-Glutathione

· Article number: 4321

· CAS-No.; 3054-47-5

- · Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the preparation Pharma Active ingredients
- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

UnaveraChemLab GmbH Am Ländbach 20 82481 Mittenwald

Germany

Tel: +49-8823-1351

Further information obtainable from: Tel.: +49-8823-1351

· Emergency telephone number:

Emergency response telephone number: +49-8823-1351

2 Hazards identification

- · Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008 The substance is not classified according to the CLP regulation.
- · Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.
- Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description

L-Acetylglutathione

Acetyl-l-Glutathione

(Contd. on page 2)

According to 1907/2006/ EEC/ Article 31

Printing date 02.05.2012

Revision: 02.05.2012 Version number 12

Page 2/6

Trade name: L-Acetylglutathione Acetyl-I-Glutathione

(Contd. of page 1)

· Identification number(s)

-

.

4 First aid measures

- · Description of first aid measures
- · **General information:** No special measures required.
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: Rinse out mouth and then drink plenty of water. Consult a doctor.
- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

Nitrogen oxides (NOx)

Sulphur dioxide (SO2)

- · Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Keep contaminated washing water and dispose of appropriately.

- Methods and material for containment and cleaning up: Pick up mechanically.
- **Reference to other sections** No dangerous substances are released.

_ GE

According to 1907/2006/ EEC/ Article 31

Printing date 02.05.2012 Revision: 02.05.2012 Version number 12

Trade name: L-Acetylglutathione Acetyl-l-Glutathione

(Contd. of page 2)

7 Handling and storage

- · Handling:
- · Precautions for safe handling Prevent formation of dust.
- · Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Protect from exposure to the light.

Store in dry conditions.

· Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · Control parameters
- Ingredients with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists valid during the making were used as basis.
- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

- · **Respiratory protection:** Suitable respiratory protective device recommended.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves Nitrile rubber, NBR
- · Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Safety glasses

(Contd. on page 4)

According to 1907/2006/ EEC/ Article 31

Printing date 02.05.2012

Revision: 02.05.2012 Version number 12

Trade name: L-Acetylglutathione Acetyl-I-Glutathione

· Body protection: Protective work clothing

(Contd. of page 3)

Page 4/6

9 Physical and chemical properties

- · Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form: Crystalline powder

Colour: White

· **Odour:** Characteristic

• pH-value (10 g/l) at 20°C: ~3

· Change in condition

Melting point/Melting range: 195-201°C
Boiling point/Boiling range: Undetermined.

· Flash point: Not applicable.

· Flammability (solid, gaseous): Product is not flammable.

• **Danger of explosion:** Product does not present an explosion hazard.

-

· **Density:** Not determined.

· Solubility in / Miscibility with

water: Soluble.

• Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions Reacts with oxidizing agents.
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: -

- GI

(Contd. on page 5)

According to 1907/2006/ EEC/ Article 31

Printing date 02.05.2012

Page 5/6

Revision: 02.05.2012 Version number 12

Trade name: L-Acetylglutathione Acetyl-l-Glutathione

(Contd. of page 4)

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: No irritant effect.
- · on the eye: May have an irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects to our experience and the information provided to us.

The substance is not subject to classification according to the latest version of the EU lists.

12 Ecological information

- Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation Must be specially treated adhering to official regulations.
- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.
- · **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

C D

According to 1907/2006/ EEC/ Article 31

Page 6/6

Printing date 02.05.2012 Revision: 02.05.2012 Version number 12

Trade name: L-Acetylglutathione Acetyl-I-Glutathione

(Contd. of page 5)

4 Transport information	
· UN-Number	
· ADR, IMDG, IATA	Void
· UN proper shipping name	
· ADR, IMDG, IATA	Void
· Transport hazard class(es)	
· ADR, IMDG, IATA	
· Class	Void
· Packing group	
· ADR, IMDG, IATA	Void
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78	
and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.

15 Regulatory information

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Abbreviations and acronyms:

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

ICAO: International Civil Aviation Organization

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage 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

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

 \cdot * Data compared to the previous version altered.