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

- **1.1 Product identifier**
  - **Product name:** (1S)-1-Pheny1-1,2,3,4-tetrahydroisoquinoline
  - **Part number:** MM1342.02
  - **CAS Number:** 118864-75-8
  - **ELINCS Number:** 445-640-5

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
  - **Application of the substance / the mixture** Reference material for laboratory use only

- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**
    - LGC Limited
    - Queens Road
    - Teddington
    - Middlesex TW11 0LY
    - UNITED KINGDOM
  - **Further information obtainable from:**
    - Product safety department
eMail : sds-request@lgcgroup.com
  - **1.4 Emergency telephone number:** +44 (0) 20 8943 7000 (Monday - Friday : 8am - 5pm)

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - **Classification according to Regulation (EC) No 1272/2008**
    - GHS09 environment
    - Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.
    - GHS07
    - Acute Tox. 4 H302 Harmful if swallowed.
    - Skin Sens. 1 H317 May cause an allergic skin reaction.

- **2.2 Label elements**
  - **Labelling according to Regulation (EC) No 1272/2008**
    - The substance is classified and labelled according to the CLP regulation.
Safety data sheet
according to 1907/2006/EC, Article 31

Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

Hazard pictograms

- Signal word Warning
- Hazard statements
  H302 Harmful if swallowed.
  H317 May cause an allergic skin reaction.
  H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements
  P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
  P273 Avoid release to the environment.
  P280 Wear protective gloves.
  P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
  P321 Specific treatment (see on this label).
  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.
  - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.1 Chemical characterisation: Substances
  - CAS No. Description
    118864-75-8 (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline
  - Identification number(s) None
  - ELINCS Number: 445-640-5
  - RTECS: -
  - Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- 4.1 Description of first aid measures
  - General information:
    Immediately remove any clothing soiled by the product.
    Symptoms of poisoning may occur even after several hours; therefore medical observation for at least 48 hours after the accident is recommended.
  - After inhalation:
    Supply fresh air and call a doctor.
    In case of unconsciousness place patient in recovery position for transport.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
**Product name:** (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:**
  - Rinse mouth. Do not induce vomiting.
  - Seek medical treatment.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable for surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
  - Formation of toxic gases is possible during heating or in case of fire.
- **5.3 Advice for firefighters**
  - **Protective equipment:** Wear self-contained respiratory protective device.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Wear protective clothing.
- **6.2 Environmental precautions:**
  - Inform respective authorities in case of seepage into water course or sewage system.
  - Do not allow to enter sewer/surface or ground water.
- **6.3 Methods and material for containment and cleaning up**
  - Dispose of contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- **6.4 Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  - Ensure good ventilation/extraction at the workplace.
  - Store in cool, dry place in tightly closed receptacles.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
  - **Requirements to be met by storerooms and receptacles:**
  - Please refer to the manufacturer's certificate for specific storage and transport temperature conditions.
  - Store only in the original receptacle unless other advice is given on the CoA.
  - Keep container in a well-ventilated place. Keep away from sources of ignition and heat.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:** None.
SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- 8.1 Control parameters
  - Ingredients with limit values that require monitoring at the workplace: Not required.
  - Additional information: Lists used were valid at the time of SDS preparation.
- 8.2 Exposure controls
  - Personal protective equipment:
    - General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work.
    - Respiratory protection: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
    - Protection of hands: The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.
  - Material of gloves: Butyl rubber, BR
  - Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection: Safety glasses

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
  - General Information
    - Form: Solid
    - Colour: White
    - Odour: Odourless
    - Odour threshold: Not determined.
    - pH-value: Not applicable.

(Contd. on page 5)
Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

- Change in condition
  - Melting point/freezing point: 82-84 °C
  - Initial boiling point and boiling range: Not determined.

- Flash point: Not applicable.
- Flammability (solid, gas): Not determined.
- Ignition temperature: Not determined.
- Decomposition temperature: Not determined.
- Auto-ignition temperature: Not determined.
- Explosive properties: Not determined.
- Explosion limits:
  - Lower: Not determined.
  - Upper: Not determined.
- Vapour pressure: Not applicable.
- Density at 20 °C: 1.19 g/cm³
- Relative density: Not determined.
- Vapour density: Not applicable.
- Evaporation rate: Not applicable.
- Solubility in / Miscibility with water at 20 °C: 0.161 g/l
- Partition coefficient: n-octanol/water: > 6.2 logP
- Viscosity:
  - Dynamic: Not applicable.
  - Kinematic: Not applicable.
- 9.2 Other information
  - No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
  - Stable under normal conditions.
- 10.2 Chemical stability
  - Stable under normal conditions.
- Thermal decomposition / conditions to be avoided:
  - Formation of toxic gases is possible during heating or in case of fire.
- 10.3 Possibility of hazardous reactions
  - No dangerous reactions known.
- 10.4 Conditions to avoid
  - Heat.
- 10.5 Incompatible materials
  - Strong oxidizing agents.
- 10.6 Hazardous decomposition products:
  - Formation of toxic gases is possible during heating or in case of fire.
Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
Harmful if swallowed.

Primary irritant effect:
- Skin corrosion/irritation Based on available data, the classification criteria are not met.
- Serious eye damage/irritation Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation
May cause an allergic skin reaction.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
- EC50/48 h 4.3 mg/l (crustacean)
- LC50/96 h 7.5 mg/l (fish)

12.2 Persistence and degradability
No further relevant information available.

12.3 Bioaccumulative potential
No further relevant information available.

12.4 Mobility in soil
No further relevant information available.

Ecotoxicological effects:
Remark: Toxic for fish

Additional ecological information:
General notes:
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product to reach ground water, water course or sewage system.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms

12.5 Results of PBT and vPvB assessment
- PBT: Not applicable.
- vPvB: Not applicable.

12.6 Other adverse effects
No further relevant information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Recommendation
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

(Contd. on page 7)
Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

- European waste catalogue
  Waste disposal key numbers from EWC have to be assigned depending on origin and processing.
- Uncleaned packaging:
  - Recommendation: Dispose of in accordance with national regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  ADR, IMDG, IATA
  UN3077
  ADR
  3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline)
  IMDG
  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline), MARINE POLLUTANT
  IATA
  ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline)

- 14.3 Transport hazard class(es)
  ADR, IMDG, IATA
  
  - Class
  9 Miscellaneous dangerous substances and articles.
  - Label

- 14.4 Packing group
  ADR, IMDG, IATA
  III

- 14.5 Environmental hazards:
  - Marine pollutant:
  Symbol (fish and tree)
  - Special marking (ADR):
  Symbol (fish and tree)
  - Special marking (IATA):
  Symbol (fish and tree)

- 14.6 Special precautions for user
  Warning: Miscellaneous dangerous substances and articles.
  - Danger code (Kemler):
  90
  - EMS Number:
  F-A,S-F

- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  Not applicable.

(Contd. on page 8)
Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

- **Transport/Additional information:**
  - **ADR**
  - **Limited quantities (LQ)**: 5 kg
    - Code: E1
    - Maximum net quantity per inner packaging: 30 g
    - Maximum net quantity per outer packaging: 1000 g
  - **Excepted quantities (EQ)**
  - **Transport category**: 3

- **UN "Model Regulation":**
  - **UN 3 0 7 7 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. ((1S)-1-PHENYL-1,2,3,4-TETRAHYDROISOQUINOLINE), 9, III**

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**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Directive 2012/18/EU**
  - **Named dangerous substances - ANNEX I** Substance is not listed.
  - **Seveso category** E2 Hazardous to the Aquatic Environment
  - **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t
  - **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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**SECTION 16: Other information**

The information in this safety data sheet (SDS) has been prepared with due care and is true and accurate to the best of our knowledge. The user must determine the suitability of the information for its particular purpose, ensure compliance with existing laws and regulations, and be aware that other or additional safety or performance considerations may arise when using, handling and/or storing the material. The information in this SDS does not purport to be all inclusive or a guarantee as to the properties of the material supplied, and should be used only as a guide. LGC makes no warranties or representations as to the accuracy and completeness of the information contained herein, shall not be held responsible for the suitability of this information for the user's intended purposes or the consequences of such use, and shall not be liable for any damage or loss, howsoever arising, direct or otherwise.

- **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)
  - **IMDG:** International Maritime Code for Dangerous Goods
  - **IATA:** International Air Transport Association
  - **GHS:** Globally Harmonised 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)
  - **PBT:** Persistent, Bioaccumulative and Toxic
  - **vPvB:** very Persistent and very Bioaccumulative
  - **Acute Tox. 4:** Acute toxicity – Category 4
  - **Skin Sens. 1:** Skin sensitisation – Category 1
  - **Aquatic Chronic 2:** Hazardous to the aquatic environment - long-term aquatic hazard – Category 2
Product name: (1S)-1-Phenyl-1,2,3,4-tetrahydroisoquinoline

- Sources
  - Data compared to the previous version altered. All sections have been updated.