Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCES/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifiers

Product Code(s) | HB1607

Product Name | Clozapine

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use | For research use only – Not for human use

Uses advised against | No information available

1.3. Details of the supplier of the safety data sheet

Supplier
HelloBio Ltd
Unit 3 IO Centre
Cabot Park
Moorend Farm Avenue
Avonmouth
Bristol
BS11 0QL
UK
Tel: +44 (0)117 318 0505
Fax: +44 (01179 811 601

For further information, please contact: technicalsupport@hellobio.com

1.4. Emergency Telephone number

Emergency telephone | - Tel: +44 (0)117 318 0505

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

GHS/CLP – REGULATION (EC) No 1272/2008

Acute oral toxicity | Category 3
Germ cell mutagenicity | Category 2
Reproductive toxicity | Category 2

DSD/DPD – Classification according to EU Directives 67/548/EEC or 1999/45/EC

Xn - Harmful
R22 – Harmful if swallowed
R63 – Possible risk of harm to the unborn child
R68 – Possible risk of irreversible effects
2.2. Label Elements

Signal Word
Danger

Hazard Statements
H301 – Toxic if swallowed
H341 – Suspected of causing genetic defects
H361 – Suspected of damaging fertility or the unborn child

Precautionary Statements
P301 + P310 - IF SWALLOWED: Immediately call POISON CENTER or doctor/physician
P304 + P313 – If exposed or concerned: Get medical advice/attention
P281 – Use personal protective equipment as required
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P201 – Obtain special instructions before use
P202 – Do not handle until all safety precautions have been read and understood
P330 - Rinse mouth
P501 - Dispose of contents/container to an approved waste disposal pant
P405 - Store locked up

Other hazards
Caution – substance not yet completely tested

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances
Product Name: Clozapine
Synonyms: 
Formula: \( C_{18}H_{19}ClN_4 \) Molecular Weight: 326.83
CAS Number 5786-21-0

4. FIRST AID MEASURES

4.1. Description of first aid measures
General advice
If symptoms persist, call a physician.

Eye contact
Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If symptoms persist, call a physician.

Skin Contact
Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If symptoms persist, call a physician.

Ingestion
Rinse mouth. If symptoms persist, call a physician.
Inhalation

Move to fresh air. If symptoms persist, call a physician.

4.2. Most important symptoms and effects, both acute and delayed
To the best of our knowledge, the chemical, physical and toxicological properties
have not been thoroughly investigated.

4.3. Indication of immediate medical attention and special treatment needed
Show this safety data sheet to the doctor in attendance. Immediate medical attention
is required.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media
Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

5.2. Special hazards arising from the substance or mixture
In combustion, may emit toxic fumes.

5.3. Precautions for fire-fighters
Wear suitable protective clothing to prevent contact with skin and eyes and self-
contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures
Do not take action without suitable protective clothing – see section 8 of SDS.
Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid breathing
vapours, mist, dust or gas.

6.2. Environmental precautions
Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up
Cover spillage with suitable absorbent material. Using non-spark tools, sweep up
material and place in an appropriate container. Decontaminate spill site with 10%
caustic solution and ventilate area until disposal is complete. Hold all material for
appropriate disposal as described under section 13 of SDS.

6.4. Reference to other sections
For required PPE see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1. Precautions for safe handling
Use in a chemical fume hood, with air supplied by an independent system. Avoid
inhalation, contact with eyes, skin and clothing. Avoid the formation of dust and
aerosols. Use in a well-ventilated area. Keep away from sources of ignition. Avoid
prolonged or repeated exposure.

7.2. Conditions for safe storage, including any incompatibilities.
Store in cool, well-ventilated area. Keep away from direct sunlight. Keep container
tightly sealed until ready for use. Recommended storage temperature: Store at RT

7.3. Specific end uses
Use in a laboratory fume hood where possible. Refer to employer’s COSHH risk
assessment.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters
Contains no substances with occupational exposure limit values.

8.2. Exposure controls

Appropriate engineering controls
Use in a fume hood where applicable. Ensure all engineering measures described under section 7 of SDS are in place. Ensure laboratory is equipped with a safety shower and eye wash station.

Personal protective equipment

Eye/face protection
Use appropriate safety glasses.

Skin protection
Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves should be inspected before use. Wash and dry hands thoroughly after handling.

Body protection
Wear appropriate protective clothing.

Respiratory protection
If risk assessment indicates necessary, use a suitable respirator.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tr>
<td>Appearance</td>
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<tr>
<td>pH</td>
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<tr>
<td>Melting/freezing point</td>
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<tr>
<td>Boiling point/range</td>
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<tr>
<td>Flash Point</td>
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<tr>
<td>Evaporation rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
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<tr>
<td>Upper/lower flammability or</td>
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</tr>
<tr>
<td>explosive limits</td>
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<tr>
<td>Relative density</td>
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<tr>
<td>Solubility(ies)</td>
<td>2eq HCl to 50mM</td>
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<tr>
<td>Auto-ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Viscosity</td>
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<td>Explosive properties</td>
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<tr>
<td>Oxidising properties</td>
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</table>

9.2. Other safety information
No data available

10. STABILITY AND REACTIVITY

10.1. Reactivity
Stable under recommended transport or storage conditions.

10.2. Chemical Stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Hazardous reactions will not occur under normal transport or storage conditions.
10.4. **Conditions to avoid**
Heat, moisture

10.5. **Incompatible materials**
Strong acids/alkalis, strong oxidising/reducing agents.

10.6. **Hazardous decomposition products**
Carbon monoxide (CO), Carbon dioxide (CO$_2$), Nitrogen oxides (NOx), Phosphorous oxides.

11. **TOXICOLOGICAL INFORMATION**

11.1. **Information on toxicological effects**

**Acute Toxicity**

- **Inhalation**  
  No Information available

- **Eye contact**  
  No Information available

- **Skin contact**  
  No Information available

- **Ingestion**  
  Harmful if swallowed

**Chronic toxicity**

- **Corrosivity**  
  No Information available

- **Sensitization**  
  No Information available

- **Neurological effects**  
  No Information available

- **Reproductive toxicity**  
  Product is or contains a chemical which is a known or suspected reproductive hazard

- **Mutagenic effects**  
  Possible risks of irreversible effects

- **Developmental Toxicity**  
  Contains ingredients that have suspected developmental hazards. Possible risk of harm to the unborn child. May cause birth defects.

**Target Organ Effects**  
No Information available

12. **ECOLOGICAL INFORMATION**

12.1. **Toxicity**

**Ecotoxicity effects**

As supplied, the preparation is not expected to present significant adverse environmental effects

12.2. **Persistence and degradability**

No Information available

12.3. **Bioaccumulative potential**

No Information available

12.4. **Mobility in soil**

No Information available

12.5. **Results of PBT and vPvB assessment**

No Information available
12.6. Other adverse effects
No Information available

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Waste from residues/unused products
Dispose of in accordance with local regulations

Contaminated packaging
Empty containers should be taken to an approved waste handling site for recycling or disposal.

Other information
According to the European Waste Catalogue. Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

14. TRANSPORT INFORMATION

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<td>Hazard class</td>
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<tr>
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<tr>
<td>Packing group</td>
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15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
No information available

15.2. Chemical Safety Assessment
No information available

16. OTHER INFORMATION

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and
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