


## Section 1: Identification

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|-----------------------------------|--|---|
| <b>Common Name/Trade Name</b>     | KETAMINE HYDROCHLORIDE   |   |
| <b>Supplier Information</b>       | Letco Medical, LLC<br>1316 Commerce Drive NW<br>Decatur, AL 35601<br>1 (800) 239-5288<br>+1 (734) 843-4693   | <b>IN CASE OF EMERGENCY:</b><br>Chemtrec<br>1 (800) 424-9300 (24 hours)<br>NSW Poisons Information Centre: 131 126 (24 hours) |
| <b>Distributor Name</b>           | Bella Corp Trading Pty Ltd<br>6/34 Dominions Road, Ashmore QLD 4214, Australia<br>Telephone: 07 5597 4169<br>Email: <a href="mailto:bellacorp@bellacorp.com.au">bellacorp@bellacorp.com.au</a> |   |
| <b>Product Synonym(s)</b>         | 2-(2'-chlorophenyl)-2-(methylamino)-cyclohexanone-Hydrochloride  |   |
| <b>Relevant Use(s) of Product</b> | Manufacture or Compounding of Substances   |   |

## Section 2: Hazards Identification

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| <b>Classification of Substance or Mixture</b> | Acute toxicity, Oral (Category 4), Skin irritation (Category 2), Eye irritation (Category 2A), Specific target organ toxicity - single exposure (Category 3), Respiratory System |  |
| <b>Signal Word</b>                            | Warning  |  |
| <b>Hazard Statement(s)</b>                    | H302<br>H332<br>H361   | Harmful if swallowed<br>Harmful if inhaled<br>Suspected of damaging fertility or the unborn child  |
| <b>Pictogram(s)</b>                           |    |  |
| <b>Precautionary Statement(s)</b>             | P201<br>P202<br>P260<br>P264<br>P270<br>P271<br>P280<br>P301+P312<br>P304+P340<br>P308+P313<br>P330<br>P405<br>P501  | Obtain special instructions before use.<br>Do not handle until all safety precautions have been read and understood.<br>Do not breathe dust/fume/gas/mist/vapours/spray.<br>Wash hands thoroughly after handling.<br>Do not eat, drink or smoke when using this product.<br>Use only outdoors or in a well-ventilated area.<br>Wear protective gloves/protective clothing/eye protection/face protection.<br>IF SWALLOWED Call a POISON CENTER or doctor/physician if you feel unwell.<br>IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing.<br>IF exposed or concerned Get medical advice/attention.<br>Rinse mouth.<br>Store locked up.<br>Dispose of contents/container to an approved waste disposal plant. |
| <b>Hazards Not Otherwise Classified</b>       | None   |  |
| <b>Ingredient(s) with Unknown Toxicity</b>    | None   |  |

## Section 3: Composition/Information on Ingredients

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| <b>Chemical Name</b>                           | 2-(2'-chlorophenyl)-2-(methylamino)-cyclohexanone-Hydrochloride |
| <b>Common Name</b>                             | Ketamine Hydrochloride  |
| <b>CAS Number</b>                              | 1867-66-9   |
| <b>Impurities and/or Stabilizing Additives</b> | No data available   |

## Section 4: First Aid Measures

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| <b>General Advice</b>                      | Immediately remove any clothing soiled by the product. Remove breathing apparatus only after contaminated clothing have been completely removed. In case of irregular breathing or respiratory arrest provide artificial respiration.  |
| <b>If Inhaled</b>                          | Take affected persons into fresh air and keep quiet. Call a doctor immediately. Use a respiration bag or breathing device. In case of unconsciousness place patient stably in side position for transportation.  |
| <b>In Case of Skin Contact</b>             | Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.  |
| <b>In Case of Eye Contact</b>              | Rinse opened eye for several minutes under running water. Seek immediate medical advice.   |
| <b>If Swallowed</b>                        | Rinse out mouth and then drink plenty of water. Immediately call a doctor.   |
| <b>Most Important Symptoms and Effects</b> | No further relevant information available. Danger: Danger of impaired breathing. Danger of disturbed cardiac rhythm. Danger of circulatory collapse. Indication of any immediate medical attention and special treatment needed. If swallowed, gastric irrigation with added, activated carbon. If necessary oxygen respiration treatment. |

## Section 5: Fire Fighting Measures

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| <b>Suitable Extinguishing Media</b>                       | Suitable extinguishing agents: CO <sub>2</sub> , extinguishing powder or water spray. Fight larger fires with water spray.  |
| <b>Special Hazards Arising From the Substance/Mixture</b> | Carbon monoxide (CO) Carbon dioxide (CO <sub>2</sub> ) Hydrogen chloride (HCl) Nitrogen oxides (NOx)  |
| <b>Special PPE and/or Precautions for Firefighters</b>    | Wear fully-protective suit. Personal protection equipment. Wear self-contained respiratory protective device. Mount respiratory protective device. Collect contaminated firefighting water separately. It must not enter the sewage system. Dispose of fire debris and contaminated firefighting water in accordance with official regulations. |

## Section 6: Accidental Release Measures

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| <b>Personal Precautions, Protective Equipment and Emergency Procedures</b> | Avoid formation of dust. Wear protective equipment. Keep unprotected persons away. Wear protective clothing. Mount respiratory protective device.                      |
| <b>Methods and Materials Used for Containment</b>                          | Do not allow to enter sewers/surface or ground water.  |
| <b>Cleanup Procedures</b>  | Pick up mechanically. Send for recovery or disposal in suitable receptacles. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation. |

## Section 7: Handling and Storage

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|--------------------------------------|--|
| <b>Precautions for Safe Handling</b> | The product should only be handled by trained personnel. Keep receptacles tightly sealed. Open and handle receptacle with care. Ensure good ventilation/exhaustion at the workplace. Enclosure or extractor facilities are required. Prevent formation of dust. Information about protection against explosions and fires: Dust can combine with air to form an explosive mixture. Protect against electrostatic charges. Keep respiratory protective device available.                            |
| <b>Conditions for Safe Storage</b>   | Store in a dry, cool and well-ventilated location. Store only in the original receptacle. Information about storage in one common storage facility: Store away from foodstuffs. Further information about storage conditions: Store under lock and key and with access restricted to technical experts or their assistants only. Keep receptacle tightly sealed. Store in cool, dry conditions in well-sealed receptacles. Protect from heat and direct sunlight. Protect from humidity and water. |

## Section 8: Exposure Controls/Personal Protection

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| <b>Components with Workplace Control Parameters</b> | Components with limit values that require monitoring at the workplace: Not required.   |
| <b>Appropriate Engineering Controls</b>             | Keep away from foodstuffs, beverages and feed. Use skin protection cream for skin protection. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.   |
| <b>PPE - Eye/Face Protection</b>                    | Tightly sealed goggles. Body protection: Wear chemical protective suit or disposable protective clothing.  |
| <b>PPE - Skin Protection</b>                        | Protective gloves. Change protective gloves regularly. The glove material has to be impermeable and resistant to the product/substance/preparation. Due to missing tests no recommendation as to the glove material can be given for the product/preparation/chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and degradation. Material of gloves: Nitrile rubber, NBR. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. Penetration time of glove material. Value for the permeation: Level 480 min. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. |
| <b>PPE - Body Protection</b>                        | Wear chemical protective suit or disposable protective clothing.   |
| <b>PPE - Respiratory Protection</b>                 | Short-term filter device: Filter P3. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure, use respiratory protective device that is independent of circulating air.  |

## Section 9: Physical and Chemical Properties

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| <b>Appearance</b>                                   | White crystalline.  |
| <b>Upper/Lower Flammability or Explosive Limits</b> | Not determined.   |
| <b>Odor</b>   | Odorless  |
| <b>Vapor Pressure</b>                               | Not applicable.   |
| <b>Odor Threshold</b>                               | No data available   |
| <b>Vapor Density</b>                                | No data available   |
| <b>pH</b>   | 3.5-4.1   |
| <b>Relative Density</b>                             | No data available   |
| <b>Melting Point/Freezing Point</b>                 | 258-261°C (496.4-501.8°F)   |
| <b>Solubility</b>                                   | Solubility in/Miscibility with water at 20°C (68°F): 265 g/l                                |
| <b>Initial Boiling Point and Boiling Range</b>      | Undetermined.   |
| <b>Flash Point</b>                                  | Not applicable.   |
| <b>Evaporation Rate</b>                             | No data available   |
| <b>Flammability (Solid, Gas)</b>                    | Not determined.   |
| <b>Partition Coefficient</b>                        | Not determined.   |
| <b>Auto-Ignition Temperature</b>                    | Product is not explosive. However, formation of explosive dust/vapor mixtures are possible. |
| <b>Decomposition Temperature</b>                    | No data available   |
| <b>Viscosity</b>                                    | Not applicable.   |

## Section 10: Stability and Reactivity

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|---|---|
| <b>Reactivity</b>                         | No further relevant information available.  |
| <b>Chemical Stability</b>                 | Not available.  |
| <b>Possibility of Hazardous Reactions</b> | No dangerous reactions known.   |
| <b>Conditions to Avoid</b>                | No further relevant information available.  |
| <b>Incompatible Materials</b>             | No further relevant information available.  |
| <b>Hazardous Decomposition Products</b>   | Thermal decomposition/conditions to be avoided: No decomposition if used according to specifications. Hazardous decomposition products: Nitrogen oxides Hydrogen chloride (HCl) Carbon monoxide and carbon dioxide. |

## Section 11: Toxicological Information

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| <b>Acute Toxicity - LD50 Oral</b>                         | Oral 617 mg/kg (mouse) Oral 447 mg/kg (rat) LD50 intraperitoneal 224 mg/kg (rat) LD50 intravenous 58.8 mg/kg (rat) |
| <b>Acute Toxicity - Inhalation</b>                        | No data available  |
| <b>Acute Toxicity - Dermal</b>                            | No data available  |
| <b>Acute Toxicity - Eye</b>                               | No data available  |
| <b>Skin Corrosion/Irritation</b>                          | No data available  |
| <b>Serious Eye Damage/Irritation</b>                      | Not available.   |
| <b>Respiratory or Skin Sensitization</b>                  | No sensitizing effects known.  |
| <b>Germ Cell Mutagenicity</b>                             | Ketamine Hydrochloride was negative in the Ames test for mutagenicity.   |
| <b>Carcinogenicity IARC</b>                               | Substance is not listed.   |
| <b>Carcinogenicity ACGIH</b>                              | No data found.   |
| <b>Carcinogenicity NTP</b>                                | Substance is not listed.   |
| <b>Carcinogenicity OSHA</b>                               | Substance is not listed.   |
| <b>Reproductive Toxicity</b>                              | No data available.   |
| <b>Specific Target Organ Toxicity - Single Exposure</b>   | No data available.   |
| <b>Specific Target Organ Toxicity - Repeated Exposure</b> | No data available.   |
| <b>Aspiration Hazard</b>                                  | No data available.   |

## Section 12: Ecological Information

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|--------------------------------------|---|
| <b>Toxicity</b>                      | biolog. Abbaubarkeit 4 % (bio) EC50/48h 265 mg/l (daphnia)  |
| <b>Persistence and Degradability</b> | No further relevant information available.  |
| <b>Bio-accumulative Potential</b>    | No further relevant information available.  |
| <b>Mobility in Soil</b>              | No further relevant information available.  |
| <b>Other Adverse Effects</b>         | Additional ecological information: General notes: Water danger class 3 (Assessment by list): extremely hazardous for water. Do not allow product to reach groundwater, water course or sewage system, even in small quantities. Danger to drinking water if even extremely small quantities leak into the ground. |

## Section 13: Disposal Considerations

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| <b>Waste Treatment Methods Product</b>               | Dispose of as waste requiring special control in accordance with the legal regulation issued by the appropriate local and national authorities. Must not be disposed of together with household garbage. Do not allow product to reach sewage system. |
| <b>Waste Treatment Methods Packaging</b>             | Packagings that cannot be cleansed are to be disposed of in the same manner as the product. Recommended cleansing agent: Water, if necessary with cleansing agents.   |
| <b>Special Precautions Landfill or Incinerations</b> | No data available   |
| <b>Other Information</b>                             | No data available   |

## Section 14: Transport Information

|                                   |                      |
|-----------------------------------|----------------------|
| <b>UN Number</b>                  | Not dangerous goods. |
| <b>UN Proper Shipping Name</b>    | N/A                  |
| <b>Transport Hazard Class(es)</b> | N/A                  |
| <b>Packaging Group</b>            | N/A                  |
| <b>Environmental Hazards</b>      | Not applicable.      |

## Section 15: Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture Controlled Substances Act Schedule III Section 355 (extremely hazardous substances): Substance is not listed. Section 313 (Specific toxic chemical listings): Substance is not listed. TSCA (Toxic Substances Control Act): Substance is not listed. Hazardous Air Pollutants Substance is not listed. Proposition 65 Chemicals known to cause cancer: Substance is not listed. Chemicals known to cause reproductive toxicity for females: Substance is not listed. Chemicals known to cause reproductive toxicity for males: Substance is not listed. Chemicals known to cause developmental toxicity: Substance is not listed. Cancerogenity categories EPA (Environmental Protection Agency) Substance is not listed. TLV (Threshold Limit Value) Substance is not listed. MAK (German Maximum Workplace Concentration) Substance is not listed. NIOSH-Ca (National Institute for Occupational Safety and Health) Substance is not listed. GHS label elements. The substance is classified and labeled according to the Globally Harmonized System (GHS). National regulations: Information about limitation of use: Employment restrictions concerning young persons must be observed. Employment restrictions concerning pregnant and lactating women must be observed. Employment restrictions concerning women of child-bearing age must be observed. Water hazard class: Water danger class 3 (Assessment by list): extremely hazardous for water. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## Section 16: Other Information

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|-------------------------------|------------------|
| <b>Additional Information</b> | N/A              |
| <b>Prepared By</b>            | Scarlotte Smith  |
| <b>Revision Date</b>          | 09/01/2023 13:15 |

### Disclaimer

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