Product Name: Ketamine hydrochloride
CAS Number: 1867-66-9
IUPAC Name: 2-(2-Chlorophenyl)-2-(methylamino)cyclohexanone hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{13}\text{H}_{16}\text{ClNO.HCl} \)
   Batch Molecular Weight: 274.19
   Physical Appearance: White crystalline solid
   Solubility: water to 100 mM
   Storage: Store at RT
   Batch Molecular Structure:

2. ANALYTICAL DATA

   HPLC: Shows >99.9% purity

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Ketamine hydrochloride

CAS Number: 1867-66-9

IUPAC Name: 2-(2-Chlorophenyl)-2-(methylamino)cyclohexanone hydrochloride

**Description:**

Non-competitive NMDA receptor antagonist (EC\(_{50}\) values are 13.6 and 17.6 μM for GluN1/GluN2A (formally NR1 and NR2A, respectively) and GluN1/GluN2B (formally NR1 and NR2B, respectively) subunit combinations respectively). Dissociative anesthetic, S-enantiomer and Active metabolite also available. Please refer to IUPHAR Guide to Pharmacology for the most recent naming conventions.

**Physical and Chemical Properties:**

- **Batch Molecular Formula:** C\(_{13}\)H\(_{16}\)ClNO.HCl
- **Batch Molecular Weight:** 274.19
- **Physical Appearance:** White crystalline solid
- **Minimum Purity:** >99%

**Storage:** Store at RT

**Solubility & Usage Info:**

- water to 100 mM

**Stability and Solubility Advice:**

- Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).
- Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
  - SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
  - SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquotted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**Other Information:**

- **INFORMATION FOR CUSTOMERS IN THE UK ONLY**
  This product is a Schedule 2 Home Office controlled substance and customers in the UK are required to hold the relevant licence or be exempt from restrictions in order to purchase and possess this material.

- **INFORMATION FOR CUSTOMERS IN THE USA ONLY**
  This product is a Schedule III DEA controlled substance and customers in the USA are required to hold a controlled substance registration in order to purchase and possess this material (in accordance with Title 21 code of federal regulations part 1300 to end).

- **INFORMATION FOR CUSTOMERS IN CANADA ONLY**
  This product is a Schedule I CDSA controlled substance and customers in Canada require an import permit to purchase this material.

**References:**