## Material Safety Data Sheet

| Section 1: Chemical Product Company Identification |   |
|--|---|
| Product Name                                       | Ketamine Hydrochloride EP Impurity C  |
| CAS No.  | 90717-17-2  |
| Identified uses                                    | Pharmaceutical Reference Standard   |
| Details of the Supplier Company                    | SynZeal Research Pvt Ltd<br>Plot No. F, Ganesh Industrial Estate<br>423/24/8, MahagujaratInd Estate<br>Sarkhej-Bavla Road,<br>Ahmedabad-382 213.<br>Gujarat, India. |
| Telephone  | +91-7969225400  |

| Section 2: Chemical Information |   |
|---------------------------------|---|
| Chemical Name                   | (2-Chlorophenyl)(1-hydroxycyclopentyl)methanone |
| CAS No.                         | 90717-17-2                                      |
| Molecular Weight                | 224.7   |
| Molecular Formula               | C12H13ClO2                                      |

| Section 3: Hazards Identification |               |  |
|-----------------------------------|---------------|--|
| Emergency Overview:               |               |  |
| Appearance                        | Yellow Liquid |  |
| Target Organs                     | NA            |  |
| Potential Health Effects:         |               |  |
| Eye                               | NIL           |  |
| Skin                              | NIL           |  |
| Ingestion                         | NIL           |  |
| Inhalation                        | NIL           |  |
| Chronic                           | NIL           |  |

| Section 4: First Aid Measures |                           |
|-------------------------------|---------------------------|
| Еуе                           | Wash with plenty of water |
| Skin                          | Wash with plenty of water |

| Ingestion          | Medical assistance for gastric lavage.  |
|--------------------|---|
| Inhalation         | Remove to fresh air, artificial respiration or oxygen if necessary.                             |
| Notes to Physician | Ketamine Hydrochloride EP Impurity C can be washed with plenty of water in case of any exposure |
|                    |   |

| Section 5: Firefighting Measures   |   |
|------------------------------------|---|
| Extinguishing Media                | Carbon dioxide, dry chemical powder, foam, water. |
| Unusual Fire and Explosion Hazards | None indicated                                    |
|                                    |   |

| Section 6: Accidental Release Measures |  |
|--|--|
| Personal Precautions                   | Wear self-contained breathing apparatus, avoid dust formation. |
| Spills/Leaks                           | Wash with plenty of water, provide adequate ventilation.       |

| Section 7: Handlings and Storage |                                   |
|----------------------------------|-----------------------------------|
| Handling                         | Wear surgical gloves              |
| Storage                          | Can be stored at room temperature |

Г

٦

| Section 8: Exposure Controls, Personal Protection |                                    |
|---|------------------------------------|
| Respiratory Protection                            | Self-contained breathing apparatus |
| Exposure Limits                                   | NA                                 |
| Eye Protection                                    | Wear safety goggles                |
| Other Protective Equipment                        | Protective clothing                |
| Skin  | Full sleeves apron                 |
| Clothing  | Cotton                             |

| Section 9: Physical and Chemical Properties |               |
|---|---------------|
| Appearance                                  | Yellow Liquid |
| Odor  | Odor less     |
| Melting Point                               | NA            |
| рН  | Basic         |
| Vapor Pressure                              | NA            |
| Vapor Density                               | NA            |
| Evaporation Rate                            | NA            |
| Viscosity                                   | NA            |

| Boiling Point            | NA                   |  |
|--------------------------|----------------------|--|
| Decomposition Temp       | NA                   |  |
| Auto ignition Temp.      | NA                   |  |
| Flash Point              | NA                   |  |
| NFPA Rating              | NA                   |  |
| Explosion Limits         |                      |  |
| Lower                    | NA                   |  |
| Upper                    | NA                   |  |
| Solubility               | Chloroform, Methanol |  |
| Specific Gravity/Density | NA                   |  |

| Section 10: Stability and Reactivity   |                         |
|--|-------------------------|
| Chemical Stability                     | Stable                  |
| Conditions to avoid                    | Direct contract to skin |
| Incompatibilities with other Materials | Keep away               |
| Hazardous Decomposition Products       | NIL                     |
| Hazardous Polymerization               | NIL                     |

Т

| Section 11: Toxicological Information |     |
|---------------------------------------|-----|
| CAS                                   | NA  |
| LD50/LC50                             | NA  |
| Carcinogenicity                       | NIL |
| Epidemiology                          | NIL |
| Teratogenicity                        | NIL |
| Reproductive Effects                  | NIL |
| Neurotoxicity                         | NIL |
| Mutagencity                           | NIL |
| Other Studies                         | NA  |

Section 12: Ecological Information

Data not available

Г

Section 13: Disposal Consideration

| RCRA P-Series  | Can be incinerated |  |
|--|--------------------|--|
| RCRA U-Series  | NA                 |  |
| Section 14: Transport Consideration  |                    |  |
| UN-Number  |                    |  |
| ADR/RID: IMDG: IATA:   |                    |  |
| UN proper shipping name  |                    |  |
| ADR/RID: Not dangerous goods<br>IMDG: Not dangerous goods<br>IATA: Not dangerous goods |                    |  |
| Transport hazard class(es)   |                    |  |
| ADR/RID: IMDG: IATA:   |                    |  |
| Packaging Group  |                    |  |
| ADR/RID: IMDG: IATA:   |                    |  |
| Environmental hazards  |                    |  |
| ADR/RID: No IMDG Marine pollutant: No IATA: No   |                    |  |
| Special precautions for users  |                    |  |
| Further information  |                    |  |
|  |                    |  |

| Section 15: Regulatory Information |                                      |
|------------------------------------|--------------------------------------|
| TSCA                               | Attached the letter                  |
| Health and Safety Reporting List   | No data available                    |
| Chemical Test Rules                | Chemical analysis report is attached |
| Section 16: Additional Information |                                      |

This product is not bioactive, non-radioactive. It is for R/D use only. Not for drug, household or other uses.

ſ

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge. It does not represent any guarantee of the product.