Material Safety Data Sheet

| Section 1: Chemical Product Company Identification | | | |
|--|--|--|--|
| Product Name | Naltrexone EP Impurity H | | |
| CAS No. | 503090-99-1 | | |
| Identified uses | Pharmaceutical Reference Standard | | |
| Details of the Supplier Company | SynZeal Research Pvt Ltd Plot No. F, Ganesh Industrial Estate 423/24/8, MahagujaratInd Estate Sarkhej-Bavla Road, Ahmedabad-382 213. Gujarat, India. | | |
| Telephone | +91-7969225400 | | |

| Section 2: Chemical Information | |
|---------------------------------|--|
| Chemical Name | 17-Butyl-4,5-Alpha-epoxy-3,14-dihydroxymorphinan-6-one |
| CAS No. | 503090-99-1 |
| Molecular Weight | 343.4 |
| Molecular Formula | C20H25NO4 |

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

| Section 4: First Aid Measures | |
|-------------------------------|---------------------------|
| Eye | 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 | Naltrexone EP Impurity H 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 | | |
| 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 | White Solid | | |
| 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 | |

| 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 | |

| 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 IMDG: Not dangerous goods 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: | Regulator | v Inforn | nation |
|---------|-------------|-----------|-----------|--------|
| Section | ± J. | regulator | y 1111011 | nation |

| TSCA | Attached the letter |
|----------------------------------|--------------------------------------|
| Health and Safety Reporting List | No data available |
| Chemical Test Rules | Chemical analysis report is attached |

Section 16: Additional Information

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

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.