

Registered Address: Chemicea Pharmaceuticals Pvt Ltd, Platinum Springs,
Unit No- A- 205&206 Second floor, Plot No: G-6, G-20 to G 24, Taloja- MIDC, Opp. Dena Bank
Navi Mumbai 410208, MH, INDIA. Email- info@chemicea.com Mob- +91 9284897978

Material Safety Data Sheet

Section 1 : Chemical Product and Company information

| | |
|---------------------------------|---|
| Product Name | Tacrolimus Monohydrate |
| CAS No. | 109581-93-3 |
| Identified uses | Pharmaceutical Reference Standard |
| Details of the Supplier Company | Chemicea Pharmaceuticals Pvt Ltd, 2nd floor, A-205 Plot Number G-6, G-20 to G-24, Platinum Spring, Vavanje Panvel Road, Taloja MIDC, Navi Mumbai, Raigad, Maharashtra, 410208, Email- info@chemicea.com Mob- +91-92848979789 |
| Telephone | +91-9284897978 |

Section 2 : Chemical Information

| | |
|-------------------|--|
| Chemical Name | (3S,4R,5S,8R,9E,12S,14S,15R,16S,18R,19R,26aS)-5,19-Dihydroxy-3-[(1E)-1-[(1R,3R,4R)-4-hydroxy-3-methoxycyclohexyl]prop-1-en-2-yl]-14,16-dimethoxy-4,10,12,18-tetramethyl-8-(prop-2-en-1-yl)-3,4,5,6,8,11,12,13,14,15,16,17,18,19,24,25,26,26a-octadecahydro-7H-15,19-epoxypyrido[2,1-c][1,4]oxaazacyclotricosine-1,7,20,21(23H)-tetrone monohydrate (as per EP) |
| CAS No. | 109581-93-3 |
| CAT No. | CP-T39005 |
| Synonyms | Tacrolimus Hydrate |
| Molecular Weight | 804.0 : 18.0 |
| Molecular Formula | C44H69NO12 : H2O |

Section 3 : Hazards Identification

Emergency Overview:

| | |
|---------------|----|
| Appearance | |
| Target Organs | NA |

Potential Health Effects:

| | |
|-----------|-----|
| Eye | NIL |
| Skin | NIL |
| Ingestion | NIL |

| | |
|------------|-----|
| Inhalation | NIL |
| Chronic | NIL |

| Section 4 : First Aid Measures | |
|--------------------------------|--|
| Eye | After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. |
| Skin | Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately |
| Swallowed | After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise. |
| Inhalation | Remove to fresh air, artificial respiration or oxygen if necessary. |
| Notes to Physician | 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 | Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. |
| Spills/Leaks | Wash with plenty of water, provide adequate ventilation. |
| Environmental precautions | Do not let product enter drains. |

| Section 7 : Handlings and Storage | |
|-----------------------------------|---|
| Handling | Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols. |
| 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 | |
| Odor | Odor less |
| Melting Point | NA |
| pH | 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 | Soluble in Methanol/DMSO |
| 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 |
| Mutagenicity | NIL |

| | |
|---------------|----|
| Other Studies | NA |
|---------------|----|

| Section 12 : Ecological Information | |
|-------------------------------------|--|
| Data not available | |

| 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 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 |
| Special precautions for users | |
| Further information | |

| Section 15 : Regulatory Information | |
|-------------------------------------|--------------------------------------|
| TSCA | Attached the letter |
| Health & 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. | |
| 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. | |