

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

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| Material | Ceftriaxone for Injection USP 250 mg, 500 mg, 1 g and 2 g |
| Manufacturer | Lupin Limited Mandideep 462 046 INDIA. |
| Distributor | Lupin Pharmaceuticals, Inc. Harborplace Tower, 21 st Floor 111, South Calvert Street Baltimore, MD 21202 United States Tel. 001-410-576-2000 Fax. 001-410-576-2221 |

2. COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredients | CAS |
|------------------------|------------|
| Ceftriaxone sodium USP | 73384-59-5 |

3. HAZARD IDENTIFICATION

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|---------------------------|--|
| Fire and Explosion | Assume that this product is capable of sustaining combustion. |
| Health | Ceftriaxone for injection is contraindicated in patients with known allergy to the cephalosporin class of antibiotics. |
| Environment | No information is available about the potential of this product to produce adverse environmental effects. |

4. FIRST AID MEASURES

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| Ingestion | If conscious, give water to drink and induce vomiting. Do not attempt to give any solid or liquid by mouth if the exposed subject is unconscious or semi-conscious. Wash out the mouth with water. Obtain medical attention. |
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| Inhalation | Move individual to fresh air. Obtain medical attention if breathing difficulty occurs. If not breathing, provide artificial respiration assistance. |
| Skin Contact | Remove contaminated clothing and flush exposed area with large amounts of water. Wash all exposed areas of skin with plenty of soap and water. Obtain medical attention if skin reaction occurs. |
| Eye Contact | Flush eyes with plenty of water. Get medical attention. |

NOTES TO HEALTH PROFESSIONALS

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| OVERDOSAGE | In the case of overdosage, drug concentration would not be reduced by hemodialysis or peritoneal dialysis. There is no specific antidote. Treatment of overdosage should be symptomatic. |
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5. FIRE FIGHTING MEASURES

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| Fire and Explosion Hazards | Assume that this product is capable of sustaining combustion. |
| Extinguishing Media | Water spray, carbon dioxide, dry chemical powder or appropriate foam. |
| Special Firefighting Procedures | For single units (packages): No special requirements needed. For larger amounts (multiple packages/pallets) of product: Since toxic, corrosive or flammable vapors might be evolved from fires involving this product and associated packaging, self-contained breathing apparatus and full protective equipment are recommended for firefighters. |
| Hazardous Combustion Products | Hazardous combustion or decomposition products are expected when the product is exposed to fire. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal Precautions | Wear protective clothing and equipment consistent with the degree of hazard. |
| Environmental Precautions | For large spills, take precautions to prevent entry into waterways, sewers, or surface drainage systems. |
| Clean-up Methods | Collect and place it in a suitable, properly labeled container for recovery or disposal. |

7. HANDLING AND STORAGE

Handling

No special precautions are necessary when handling packed product. In case of accident, avoid breathing dust from crushed tablets. Avoid contact with skin and eyes. Wash hands after use.

Storage

Ceftriaxone for injection sterile powder should be stored at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature] and protected from light. After reconstitution, protection from normal light is not necessary. The color of solutions ranges from light yellow to amber, depending on the length of storage, concentration and diluent used.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear appropriate clothing to avoid skin contact. Wash hands and arms thoroughly after handling.

9. PHYSICAL AND CHEMICALS PROPERTIES

Physical Form

Ceftriaxone for injection USP is supplied as a sterile crystalline powder in glass vials. The following packages are available:

Vials containing 250 mg equivalent of ceftriaxone.

Box of 1 (NDC 68180-611-01) and box of 10 (NDC 68180-611-10).

Vials containing 500 mg equivalent of ceftriaxone.

Box of 1 (NDC 68180-622-01) and box of 10 (NDC 68180-622-10).

Vials containing 1 g equivalent of ceftriaxone.

Box of 1 (NDC 68180-633-01) and box of 10 (NDC 68180-633-10).

Vials containing 2 g equivalent of ceftriaxone.

Box of 10 (NDC 68180-644-10).

NOTE: Ceftriaxone for injection USP sterile powder should be stored at 20° to 25°C (68° to 77°F) [See USP Controlled Room Temperature] and protected from light.

10. STABILITY AND REACTIVITY

Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Carcinogenesis

Considering the maximum duration of treatment and the class of the compound, carcinogenicity studies with ceftriaxone in animals have not been performed. The maximum duration of animal toxicity studies was 6 months.

Mutagenesis

Genetic toxicology tests included the Ames test, a micronucleus test and a test for chromosomal aberrations in human lymphocytes cultured *in vitro* with ceftriaxone. Ceftriaxone showed no potential for mutagenic activity in these studies.

Impairment of Fertility

Ceftriaxone produced no impairment of fertility when given intravenously to rats at daily doses up to 586 mg/kg/day, approximately 20 times the recommended clinical dose of 2 g/day.

12. ECOLOGICAL INFORMATION

No information available.

13. DISPOSAL CONSIDERATION

Incinerate in an approved facility. Follow all federal state and local environmental regulations.

14. TRANSPORT INFORMATION

IATA/ICAO - Not Regulated

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|---------------------------|---|-----|
| IATA Proper shipping Name | : | N/A |
| IATA UN/ID No | : | N/A |
| IATA Hazard Class | : | N/A |
| IATA Packaging Group | : | N/A |
| IATA Label | : | N/A |

IMDG - Not Regulated

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|---------------------------|---|-----|
| IMDG Proper shipping Name | : | N/A |
| IMDG UN/ID No | : | N/A |
| IMDG Hazard Class | : | N/A |
| IMDG Flash Point | : | N/A |
| IMDG Label | : | N/A |

DOT - Not Regulated

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|--------------------------|---|-----|
| DOT Proper shipping Name | : | N/A |
| DOT UN/ID No | : | N/A |
| DOT Hazard Class | : | N/A |
| DOT Flash Point | : | N/A |
| DOT Packing Group | : | N/A |
| DOT Label | : | N/A |

15. REGULATORY INFORMATION

No information available.

16. OTHER INFORMATION

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Nothing herein shall be deemed to create any warranty, express or implied. It is the responsibility of the user to determine the applicability of this information and the suitability of the material or product for any particular purpose.

Lupin shall not be held liable for any damage resulting from handling or from contact with the above product. Lupin reserves the right to revise this MSDS.