MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

Material: Amlodipine Besylate Tablets USP 2.5 mg, 5 mg and 10 mg
Manufacturer: Lupin Limited
Goa 403 722
INDIA.
Distributor: Lupin Pharmaceuticals, Inc.
Harborplace Tower, 21st 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

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS</th>
<th>Quantity</th>
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<tr>
<td>Amlodipine Besylate equivalent to Amlodipine</td>
<td>88150-42-9</td>
<td>2.5 mg, 5 mg and 10 mg</td>
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3. HAZARD IDENTIFICATION

Fire and Explosion: Expected to be non-combustible
Health: Amlodipine besylate tablets are contraindicated in patients with known sensitivity to amlodipine.
Environment: No information is available about the potential of this product to produce adverse environmental effects.
4. FIRST AID MEASURE

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.

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

Medical Treatment
Treat according to locally accepted protocols. For additional guidance, refer to the current prescribing information or to the local poison control information center. Protect the patient’s airway and support ventilation and perfusion. Meticulously monitor and maintain, within acceptable limits, the patient’s vital signs, blood gases, serum electrolytes, etc.

OVERDOSAGE
Overdosage might be expected to cause excessive peripheral vasodilation with marked hypotension and possibly a reflex tachycardia. In humans, experience with intentional overdosage of amlodipine is limited.

Single oral doses of amlodipine maleate equivalent to 40 mg amlodipine/kg and 100 mg amlodipine/kg in mice and rats, respectively, caused deaths. Single oral amlodipine maleate doses equivalent to 4 or more mg amlodipine/kg or higher in dogs (11 or more times the maximum recommended human dose on a mg/m² basis) caused a marked peripheral vasodilation and hypotension.

If massive overdose should occur, initiate active cardiac and respiratory monitoring. Frequent blood pressure measurements are essential. Should hypotension occur, provide cardiovascular support including elevation of the extremities and the judicious administration of fluids. If hypotension remains unresponsive to these conservative measures, consider administration of vasopressors (such as phenylephrine) with attention to circulating volume and urine output. As amlodipine is highly protein bound, hemodialysis is not likely to be of benefit.
5. FIRE FIGHTING MEASURE

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

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 control measures required for the normal handling of this product. Normal room ventilation is expected to be adequate for routine handling of this product.

Storage
Store at 20° to 25°C (68° to 77°F) [see USP controlled room temperature] and dispense in tight, light-resistant containers (USP).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Wear appropriate clothing to avoid skin contact. Wash hands and arms thoroughly after handling.
9. PHYSICAL AND CHEMICAL PROPERTIES

Physical Form

2.5 mg Tablets
Amlodipine Besylate Tablets USP, 2.5 mg – (amlodipine besylate equivalent to 2.5 mg of amlodipine per tablet) are supplied as white to off-white, diamond shaped, flat faced, beveled edge tablets, debossed with ‘LU’ on one side and ‘H11’ on the other side and supplied as follows:

NDC 68180-750-09 Bottles of 90

5 mg Tablets
Amlodipine Besylate Tablets USP, 5 mg – (amlodipine besylate equivalent to 5 mg of amlodipine per tablet) are supplied as white to off-white, elongated octagonal, flat faced, beveled edge tablets, debossed with ‘LU’ on one side and ‘H12’ on the other side and supplied as follows:

NDC 68180-751-09 Bottles of 90
NDC 68180-751-17 Bottles of 300
NDC 68180-751-03 Bottles of 1000

10 mg Tablets
Amlodipine Besylate Tablets USP, 10 mg – (amlodipine besylate equivalent to 10 mg of amlodipine per tablet) are supplied as white to off-white, round, flat faced, beveled edge tablets, debossed with ‘LU’ on one side and ‘H13’ on the other side and supplied as follows:

NDC 68180-752-09 Bottles of 90
NDC 68180-752-03 Bottles of 1000

10. STABILITY AND REACTIVITY

Stable under recommended storage conditions.

11. TOXICOLOGICAL INFORMATION

Carcinogenesis, Mutagenesis, Impairment of Fertility

Rats and mice treated with amlodipine maleate in the diet for up to two years, at concentrations calculated to provide daily dosage levels of 0.5, 1.25, and 2.5 amlodipine mg/kg/day, showed no evidence of a carcinogenic effect of the drug. For the mouse, the highest dose was, on a mg/m² basis, similar to the maximum recommended human dose
of 10 mg amlodipine/day.\textsuperscript{3} For the rat, the highest dose was, on a mg/m\textsuperscript{2} basis, about twice the maximum recommended human dose.\textsuperscript{3}

Mutagenicity studies conducted with amlodipine maleate revealed no drug related effects at either the gene or chromosome level.

There was no effect on the fertility of rats treated orally with amlodipine maleate (males for 64 days and females for 14 days prior to mating) at doses up to 10 mg amlodipine/kg/day (8 times the maximum recommended human dose\textsuperscript{3} of 10 mg/day on a mg/m\textsuperscript{2} basis).

\textsuperscript{3} Based on patient weight of 50 kg.

### 12. ECOLOGICAL INFORMATION

No relevant studies identified.

### 13. DISPOSAL CONSIDERATION

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

### 14. TRANSPORT INFORMATION

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15. REGULATORY INFORMATION

This Section Contains Information relevant to compliance with other Federal and/or state laws.

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.