LUPIN LIMITED

SAFETY DATA SHEET

Section 1: Identification

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Material	**Tetrabenazine Tablets** **12.5 mg and 25 mg**
Manufacturer	**Lupin Limited** Nagpur 441 108 India
Distributor	Lupin Pharmaceuticals, Inc. 111 South Calvert Street, Harborplace Tower, 21st Floor, Baltimore, Maryland 21202 United States Tel. 001-410-576-2000 Fax. 001-410-576-2221

Section 2: Hazard(s) Identification

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Fire and Explosion

Expected to be non-combustible.

Health

Tetrabenazine is contraindicated in patients:

- Who are actively suicidal, or in patients with untreated or inadequately treated depression
- With hepatic impairment
- Taking monoamine oxidase inhibitors (MAOIs). Tetrabenazine should not be used in combination with an MAOI, or within a minimum of 14 days of discontinuing therapy with an MAOI
- Taking reserpine. At least 20 days should elapse after stopping reserpine before starting tetrabenazine
- Taking deutetrabenazine or valbenazine

Environment

No information is available about the potential of this product to produce adverse environmental effects.

Section 3: Composition/Information on Ingredients

Section 3, Composition/information on ingredients

Ingredients	**CAS**
Tetrabenazine	58-46-8

Section 4: First-Aid Measures

Section 4, First-aid measures

Ingestion	Flush out mouth with water, consult a physician immediately.
Inhalation	In case of inhalation remove to fresh air and seek medical aid.
Skin Contact	Remove immediately contaminated clothes, wash affected skin with plenty of water.
Eye Contact	In case of contact with eyes rinse thoroughly with plenty of water and get medical advice.

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	Three episodes of overdose occurred in the open-label trials performed in support of registration. Eight cases of overdose with tetrabenazine have been reported in the literature. The dose of tetrabenazine in these patients ranged from 100 mg to 1g. Adverse reactions associated with tetrabenazine overdose include acute dystonia, oculogyric crisis, nausea and vomiting, sweating, sedation, hypotension, confusion, diarrhea, hallucinations, rubor, and tremor. Treatment should consist of those general measures employed in the management of overdosage with any CNS-active drug. General supportive and symptomatic measures are recommended. Cardiac rhythm and vital signs should be monitored. In managing overdosage, the possibility of multiple drug involvement should always be considered. The physician should consider contacting a poison control center on the treatment of any overdose.

Section 5: Fire-Fighting Measures

Section 5, Fire-fighting measures

Fire and Explosion Hazards	Assume that this product is capable of sustaining combustion.
Extinguishing Media	Use extinguishing media appropriate to surrounding fire conditions, such as water, fog, spray, dry chemical, regular foam, carbon dioxide.
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.

Section 6: Accidental Release Measures

Section 6, Accidental release measures

Personal Precautions	Avoid excessive contact and contact with eyes. Wear safety goggles or shield.
Environmental Precautions	For large spills, take precautions to prevent entry into waterways, sewers, or surface drainage systems.
Clean-up Methods	This material is not known to possess additional hazards when spilled beyond those of other non-hazardous solids.

Section 7: Handling and Storage

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Handling	No special control measures required for the normal handling of this product.
Storage	Store at 25°C (77°F); excursions permitted to 15° to 30°C (59° to 86°F) [see USP Controlled Room Temperature].

Section 8: Exposure Controls/Personal Protection

Section 8, Exposure controls/personal protection

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

Section 9: Physical and Chemical Properties

Section 9, Physical and chemical properties

Physical Form	Tetrabenazine tablets are available in the following strengths and packages: **The 12.5 mg:** White to off-white, round shaped, flat faced tablets with bevelled edges, nonscored, debossed with 'LU' one side and 'L71' on the other side. Bottles of 112 NDC 68180-408-58. **The 25 mg:** Light yellow colored, round shaped, flat faced tablets with bevelled edges, debossed with 'L' and 'U' separated by scoreline on one side and 'L72' on other side. Bottles of 112 NDC 68180-409-58.

Section 10: Stability and Reactivity

Section 10, Stability and reactivity

Stable under recommended storage conditions.

Section 11: Toxicological Information

Section 11, Toxicological information

Carcinogenesis, Mutagenesis, Impairment of Fertility

No increase in tumors was observed in $P^{53+/-}$ transgenic mice treated orally with tetrabenazine (5, 15, and 30mg/kg/day) for 26 weeks.

No increase in tumors was observed in Tg.rasH2 transgenic mice treated orally with a major human metabolite, 9-desmethyl-β-DHTBZ (20, 100, and 200 mg/kg/day), for 26 weeks.

Tetrabenazine and metabolites α-HTBZ, β-HTBZ, and 9-desmethyl-β-DHTBZ were negative in an *in vitro* bacterial reverse mutation assay. Tetrabenazine was clastogenic in an *in vitro* chromosomal aberration assay in Chinese hamster ovary cells in the presence of metabolic activation. α-HTBZ and β- HTBZ were clastogenic in an *in vitro* chromosome aberration assay in Chinese hamster lung cells in the presence and absence of metabolic activation. 9-desmethyl-β- DHTBZ was not clastogenic in an *in vitro* chromosomal aberration assay in human peripheral blood mononuclear cells in the presence or absence of metabolic activation. *In vivo* micronucleus assays were conducted in male and female rats and male mice. Tetrabenazine was negative in male mice and rats but produced an equivocal response in female rats.

Oral administration of tetrabenazine (5, 15, or 30 mg/kg/day) to female rats prior to and throughout mating, and continuing through day 7 of gestation resulted in disrupted estrous cyclicity at doses greater than 5 mg /kg/day (less than the MRHD on a mg/m^2 basis).

No effects on mating and fertility indices or sperm parameters (motility, count, density) were observed when males were treated orally with tetrabenazine (5, 15, or 30 mg/kg/day; up to 3 times the MRHD on a mg/m^2 basis) prior to and throughout mating with untreated females. Because rats dosed with tetrabenazine do not produce 9-desmethyl-beta-DHTBZ, a major human metabolite, these studies may not have adequately assessed the potential of tetrabenazine to impair fertility in humans.

Section 12: Ecological Information

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No relevant studies identified.

Section 13: Disposal Considerations

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

Section 14: Transport Information

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IATA/ICAO - Not Regulated

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

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

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

Section 15: Regulatory Information

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

Section 16: Other Information

Section 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 SDS.