Annora

SAFETY DATA SHEET

Section 1: Identification	
Material	Zileuton Extended-Release Tablet 600 mg
Manufacturer	Annora Pharma Private Limited, Survey No. 261, Annaram Village, Gummadidala Mandal, Sangareddy, Telangana 502313, India (IND)
Distributor	Camber Pharmaceuticals, Inc., Piscataway, NJ 08854

Section 2: Hazard(s) Identification	
Fire and Explosion	Expected to be non-combustible.
Health	The use of Zileuton Extended-Release Tablets is contraindicated in patients with: • Active liver disease or persistent hepatic function enzyme elevations greater than or equal to 3 times the upper limit of normal (≥3×ULN). • A history of allergic reaction to zileuton or any of the ingredients of Zileuton Extended-Release Tablets (e.g., rash, eosinophilia, etc.).
Environment	No information is available about the potential of this product to produce adverse environmental effects.

Section 3: Composition/Information on Ingredients	
Ingredient	**CAS**
Zileuton	111406-87-2
Colloidal Silicon Dioxide	7631-86-9
Crospovidone	9003-39-8
Ferric Oxide	1309-37-1
Hydroxy Propyl Cellulose	9004-64-2
Magnesium Stearate	557-04-0
Mannitol	69-65-8
Microcrystalline Cellulose	9004-34-6
Opadry Clear	NA
Pregelatinized Starch	9005-25-8
Sodium Lauryl Sulfate	151-21-3

Sodium Starch Glycolate	9063-38-1
Section 4: First-Aid Measures	
Ingestion	Never give anything by mouth to an unconscious person. Wash out mouth with water. Do not induce vomiting unless directed by medical personnel. Seek medical attention immediately
Inhalation	Remove to fresh air and keep patient at rest. Seek medical attention immediately.
Skin Contact	Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek medical attention.
Eye Contact	Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention immediately
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	Human experience of acute overdose with zileuton is limited. A patient in a clinical study took between 6.6 and 9.0 grams of zileuton immediate release tablets in a single dose. Vomiting was induced and the patient recovered without sequelae. Zileuton is not removed by dialysis. Should an overdose occur, the patient should be treated symptomatically and supportive measures instituted as required. If indicated, elimination of unabsorbed drug should be achieved by emesis or gastric lavage; usual precautions should be observed to maintain the airway. A Certified Poison Control Centre should be consulted for up-to-date information on management of overdose with Zileuton Extended-Release Tablets.
Section 5: Fire-Fighting Measures	
Fire and Explosion Hazards	Fine particles (such as dust and mists) may fuel fires/explosions
Extinguishing Media	Extinguish fires with CO2, extinguishing powder, foam, or water.

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	
Personal Precautions	Personnel involved in clean-up should wear appropriate
Environmental Precautions	Place waste in an appropriately labeled, sealed container for disposal.Care should be taken to avoid environmental release.
Clean-up Methods	Contain the source of spill if it is safe to do so. Collect spilled material by a method that controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of dry solids. Clean spill area thoroughly.
Section 7: Handling and Storage	
Handling	If tablets or capsules are crushed and/or broken, avoid breathing dust and avoid contact with eyes, skin, and clothing. When handling, use appropriate personal protective equipment. Wash thoroughly after handling. Releases to the environment should be avoided.
Storage	Store at 20°C to 25°C (68°F to 77°F), excursions permitted between 15°C to 30°C (between 59°F to 86°F). [See USP controlled room temperature]. Protect from light
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	
Physical state	Extended-Release Tablet

Description	Zileuton extended-release tablets are oblong biconvex, bilayer film-coated tablets with pink to red IR layer debossed with '66' on one side and white to off white ER layer debossed with 'V' on the other side; they are available in: Bottles of 120 tablets (NDC 31722-044-12)

Section 10: Stability and Reactivity

Stable under recommended storage conditions

Section 11:Toxicological Information

Carcinogenesis, Mutagenesis, Impairment of Fertility

In 2-year carcinogenicity studies, increases in the incidence of liver, kidney, and vascular tumours in female mice and a trend toward an increase in the incidence of liver tumours in male mice were observed at 450 mg/kg/day (providing approximately 5 times [females] or 8 times [males] the systemic exposure [AUC=64 μg·hr/mL] achieved at the MRHD). No increase in the incidence of tumours was observed at 150 mg/kg/day (providing approximately 2 to 3 times the systemic exposure [AUC] achieved at the MRHD). In rats, an increase in the incidence of kidney tumours was observed in both sexes at 170 mg/kg/day (providing approximately 8 times [males] or 16 times [females] the systemic exposure [AUC] achieved at the MRHD). No increased incidence of kidney tumours was seen at 80 mg/kg/day (providing approximately 4 times [males] or 7 times [females] the systemic exposure [AUC] achieved at the MRHD). Although a dose related increased incidence of benign Leydig cell tumours was observed, Leydig cell tumorigenesis was prevented by supplementing male rats with testosterone.

Zileuton was negative in genotoxicity studies including bacterial reverse mutation (Ames) using S. typhimurium and E. coli, chromosome aberration in human lymphocytes, in vitro unscheduled DNA synthesis (UDS), in rat hepatocytes with or without zileuton pre-treatment and in mouse and rat kidney cells with zileuton pre-treatment, and mouse micronucleus assays. However, a dose-related increase in DNA adduct formation was reported in kidneys and livers of female mice treated with zileuton. Although some evidence of DNA damage was observed in a UDS assay in hepatocytes isolated from Aroclor-1254-treated rats, no such finding was noticed in hepatocytes isolated from monkeys, where the metabolic profile of zileuton is more similar to that of humans.

In reproductive performance/fertility studies, zileuton produced no effects on fertility in rats at oral doses up to 300 mg/kg/day (providing at least 10 times [male rats] and greater than 20 times [female rats] the systemic exposure [AUC] achieved at the MRHD). However, reduction in fetal implants was observed at oral doses of 150 mg/kg/day and higher (providing approximately 20 times the systemic exposure [AUC] achieved at the MRHD). Comparative systemic exposure (AUC) is based on measurements in male rats or nonpregnant female rats obtained from the comparable doses of 3-month or 1-year general toxicity study at similar dosages. Increases in gestation length, prolongation of estrus cycle, and increases in stillbirths were observed at oral doses of 75 mg/kg/day and higher (providing approximately 7 times the systemic exposure [AUC] achieved at the MRHD on an AUC basis with data obtained from the comparable doses of 2-year dietary carcinogenicity study). No adverse effects were observed at 15 mg/kg/day in the study at estimated exposure similar to that at the MRHD.

Section 12: Ecological Information

No relevant studies identified.

Section 13: Disposal Considerations

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

Section 14: Transport Information

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

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

Section 16: Other Information, including date of preparation or last revision

Issue Date: 06-04-2023

Version: 01

Further information

Revision date: 06-04-2023

Revision note: 01. Excipient details included in section 03.

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. 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.

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