

### Rapamune Tablets

Preparation Date 03-Jul-2007

Revision Date 28-Mar-2008

Revision Number 2

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

**Product Name** Rapamune Tablets  
**Common Name** Not available  
**Chemical Name** Not applicable  
**Synonyms** Rapamycin, Sirolimus  
**Product Use** Pharmaceutical product  
**Classification** Immunosuppressive Agent

**Supplier** Wyeth  
 P.O. Box 8299  
 Philadelphia, PA 19101 USA.  
 Telephone: 1-610-688-4400

**Emergency Telephone Number** Chemtec USA, Puerto Rico, Canada 1-800-424-9300  
 Chemtec International 1-703-527-3887

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	CAS-No	EC No.	Composition	Classification
Sirolimus	53123-88-9	Not available	1 - 2 mg/tablet	Xn; R22, R36; S22, S24/25, S 36/37
Inactive Ingredients	Not applicable	Not applicable	Remainder	Not applicable***

## 3. HAZARDS IDENTIFICATION

### Emergency Overview

This contains an active pharmaceutical ingredient that can affect body functions; handle with caution.

**Appearance** Pharmaceutical Tablet \*\*\*

**Physical State** Solid

**Odor** Not available

### Potential Physical Hazards

Powders and solids are presumed to be combustible.

### Potential Health Effects

**Eyes**

Not available

**Skin**

Not available

**Inhalation**

Not available

**Ingestion**

The most common effects may include increased susceptibility to infections such as bronchitis, Herpes simplex, pneumonia, pyelonephritis, upper respiratory infection, urinary tract infection, abscess, cellulitis, Herpes zoster infection, peritonitis, sepsis gastritis, gastroenteritis, gingivitis, mouth ulceration, oral moniliasis, stomatitis, cough increase, pneumoniasinusitis, fungal dermatitis, skin ulcer, conjunctivitis, fever, chills, arthralgia, pain, malaise, sweating, flu syndrome, kidney problems, exfoliative dermatitis. May inhibit production of certain growth factors that affect angiogenesis, fibroblast proliferation and vascular permeability; affect wound healing; cause fluid retention including peripheral edema, lymphedema, pleural effusion and pericardial effusion.

May cause cancer. May cause harm to the unborn child. May impair fertility. The possible development of lymphoma may result from immunosuppression.

Please see Patient Package Insert for further information.

**Therapeutic Target Organ(s)** Immune system.

Not listed by OSHA, NTP or IARC. Potential cancer hazard.

**Potential Environmental Effects** See Section 12.

#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.
<b>Skin Contact</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
<b>Inhalation</b>	Move to fresh air. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.
<b>Ingestion</b>	If symptoms persist, call a physician. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

#### 5. FIRE-FIGHTING MEASURES

<b>Flammable Properties</b>	Not flammable
<b>Extinguishing Media</b>	
<b>Suitable Extinguishing Media</b>	Use water spray, foam, dry chemical or carbon dioxide.
<b>Unsuitable Extinguishing Media</b>	Do NOT use water jet.
<b>Fire Fighting</b>	Evacuate area and fight fire from a safe distance. Cool closed containers exposed to fire with water spray. In the event of fire and/or explosion do not breathe fumes.
<b>Hazardous Combustion Products</b>	Carbon oxides, nitrogen oxides.
<b>Protective Equipment and Precautions for Firefighters</b>	In the event of fire, wear self-contained breathing apparatus and special protective equipment for fire fighters.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Refer to protective measures listed in Sections 7 and 8.
<b>Environmental Precautions</b>	Prevent product from entering drains. Local authorities should be advised if a significant spill cannot be contained.
<b>Methods for Containment</b>	Not available
<b>Methods for Cleaning up</b>	Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Avoid formation of dust and aerosols.

## 7. HANDLING AND STORAGE

<b>Handling</b>	For personal protection see Section 8. Handle in accordance with good industrial hygiene and safety practice. Skin should be washed after contact. Avoid formation of dust and aerosols.
<b>Storage</b>	No special safety precautions required. Keep container tightly closed.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Common Name</b> Sirolimus	<b>Exposure Guideline</b> 1 mcg/m <sup>3</sup>
<b>Engineering Controls</b>	Apply technical measures to comply with the occupational exposure guideline. Enclose operations to prevent aerosol generation. General ventilation shall not be used as the primary control system. Isolators, fume hoods, or biological safety cabinets may be used based on a risk assessment.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	Provide eye protection based on risk assessment.
<b>Skin Protection</b>	Wear nitrile or latex gloves. Wear protective garment.
<b>Respiratory Protection</b>	Base respirator selection on a risk assessment.
<b>General Hygiene Considerations</b>	When using, do not eat, drink or smoke. General industrial hygiene practice. Wash hands before breaks and at the end of workday.
<b>Other</b>	Limit access to only personnel trained in the safe handling of this material. Consult a health and safety professional for specific PPE, respirator, and risk assessment guidance.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Pharmaceutical Tablet ***	<b>Physical State</b>	Solid
<b>Color</b>	Various	<b>Odor</b>	Not available
<b>Odor Threshold</b>	Not available		
<b>pH</b>	Not applicable		
<b>Specific Gravity</b>	Not applicable	<b>Water Solubility</b>	Insoluble
<b>Solubility</b>	Not applicable	<b>Evaporation Rate</b>	Not applicable
<b>Partition Coefficient (n-octanol/water)</b>	Not available	<b>Vapor Pressure</b>	Not applicable
<b>Boiling Point</b>	Not applicable	<b>Autoignition Temperature</b>	Not applicable
<b>Flash Point</b>	Not applicable	<b>Method</b>	None
<b>Melting Point</b>	Not available		
<b>Flammability Limits in Air</b>	<b>Upper</b> Not applicable	<b>Lower</b> Not applicable	
<b>Explosion Limits</b>	<b>Upper</b> Not applicable	<b>Lower</b> Not applicable	

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable at room temperature.
<b>Conditions to Avoid</b>	No data available
<b>Materials to Avoid</b>	No materials to be especially mentioned.
<b>Hazardous Decomposition Products</b>	None under normal use.
<b>Possibility of Hazardous Reactions</b>	None under normal use.

## 11. TOXICOLOGICAL INFORMATION

The following effects are based on the Active Pharmaceutical Ingredient.

### Acute Toxicity

#### **Sirolimus**

<b>LD50 Oral</b>	>800 mg/kg rats >2500 mg/kg mice IP 600 mg/kg mice
<b>Acute Dermal Irritation</b>	Not available
<b>Primary Eye Irritation</b>	Not available
<b>Sensitization</b>	Hypersensitivity reactions, including anaphylactic or anaphylactoid reactions have been reported with therapeutic use of Sirolimus.

### Multiple Dose Toxicity

#### **Sirolimus**

<b>No Toxicologic Effect Dose/Species/Study Length:</b>	See below
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### Maximum Tolerated Dose (MTD), Oral

#### **Sirolimus**

<b>Carcinogenicity</b>	Animal studies revealed increased incidences of lymphoma in mice, hepatocellular tumors in male mice, granulocytic leukemia in female mice, and testicular interstitial cell adenoma in rats.
<b>Genetic Toxicity</b>	Negative in a battery of genotoxicity tests.
<b>Reproductive Toxicity</b>	In all reproductive studies, embryo/fetal toxicity was manifested as decreased number of fetuses and/or pups and decreased fetal and/or pup weights, and resulted in maternal toxicity (decreased body weight parameters) in rats.
<b>Developmental Toxicity</b>	No teratogenic effects were observed in rats or rabbits.

#### **Sirolimus**

<b>Target Organ(s) of Toxicity</b>	No data available
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## 12. ECOLOGICAL INFORMATION

### Chemical Fate Information

#### **Sirolimus**

<b>Mobility</b>	May adsorb on sludge or particles in natural waters.
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<b>Biodegradability</b>	Not available
<b>Stability in Water</b>	Hydrolyses in water.
<b>Bioaccumulation</b>	Bioaccumulative potential.

**Ecotoxicity****Sirolimus**

<b>Microorganisms</b>	EC50 > Aqueous solubility limit
<b>Algae</b>	EC50/72h/algae = 0.063 mg/l, NOEC = 0.015 mg/l
<b>Daphnia</b>	EC50/48h/daphnia > Aqueous solubility limit, NOEC > Aqueous solubility limit.
<b>Fish</b>	LC50/96h/Fathead minnows > Aqueous solubility limit, NOEC > Aqueous solubility limit.

### 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of in accordance with local and national regulations.
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### 14. TRANSPORT INFORMATION

<b>Transport Information</b>	This material is not classified as hazardous for transport.
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### 15. REGULATORY INFORMATION

According to present data no classification and labeling is required according to Directives 67/548/EEC or 1999/45/EC.

### 16. OTHER INFORMATION

<b>Prepared By</b>	Wyeth Department of Environment, Health & Safety
<b>Format</b>	This MSDS was prepared in accordance with Directive 2001/58/EC.
<b>List of References</b>	See Patient Package Insert for more information.
<b>Revision Summary</b>	Changes to Section 8

## Disclaimer:

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**End of MSDS**