Safety Data Sheet
European Format

Rapamune Oral Solution

Preparation Date 03-Jul-2007 **Revision Date** 05-Sep-2008 **Revision Number** 3

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

Product Name Rapamune Oral Solution
Common Name Not available
Chemical Name Not applicable
Synonyms Not available
Product Use Pharmaceutical product
Classification Immunosuppresive Agent

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

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

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common Name	CAS-No	EC No.	Composition	Classification
Inactive Ingredients	Not applicable	Not applicable	Remainder	Not applicable
Sirolimus	53123-88-9	Not available	1 mg/ml	Xn; R22, R36; S22, S24/25, S 36/37
Ethanol	64-17-5	200-578-6	1.5 - 2.5%	R38, S37

3. HAZARDS IDENTIFICATION

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

Appearance Pharmaceutical Liquid **Physical State** Liquid **Odor** Not available

Potential Physical Hazards None known

Potential Health Effects

Eyes Irritating to eyes.
Skin May cause irritation.
Inhalation May cause mucous membrane and upper respiratory tract irritation.
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 and 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

Eye Contact In the case of contact with eyes, rinse immediately with plenty of water for 15 minutes and seek medical advice.

Skin Contact Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.

Inhalation Move to fresh air. Artificial respiration and/or oxygen may be necessary. If symptoms persist, call a physician.

Ingestion 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

Flammable Properties Slightly flammable

Extinguishing Media

Suitable Extinguishing Media Use alcohol-resistant foam, dry chemical or carbon dioxide..

Unsuitable Extinguishing Media Do NOT use water jet.

Fire Fighting 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.

Hazardous Combustion Products Carbon oxides, nitrogen oxides.

Protective Equipment and Precautions for Firefighters In the event of fire, wear self-contained breathing apparatus and special protective equipment for fire fighters.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Refer to protective measures listed in Sections 7 and 8.

Environmental Precautions Prevent product from entering drains. Local authorities should be advised if a significant spill cannot be contained.

Methods for Containment Not available

Methods for Cleaning up Take up mechanically and collect in suitable container for disposal. Clean contaminated surface thoroughly. Avoid formation of dust and aerosols.

7. HANDLING AND STORAGE

Handling 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.

Storage No special safety precautions required. Keep container tightly closed.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Common Name	**Exposure Guideline**
Sirolimus	1 mcg/m^3
Ethanol	1900 mg/m^3

Engineering Controls 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.

Personal Protective Equipment

Eye/face Protection Avoid contact with skin and eyes. Provide eye protection based on risk assessment..
Skin Protection Wear nitrile or latex gloves. Wear protective garment.
Respiratory Protection Base respirator selection on a risk assessment..

General Hygiene Considerations When using, do not eat, drink or smoke. General industrial hygiene practice. Wash hands before breaks and at the end of workday.

Other Consult a health and safety professional for specific PPE, respirator, and risk assessment guidance.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Pharmaceutical Liquid	**Physical State**	Liquid
Color	Yellow	**Odor**	Not available
Odor Threshold	Not available		
pH	Not available		
Specific Gravity	Not available	**Water Solubility**	Insoluble
Solubility	Not applicable	**Evaporation Rate**	Not available
Partition Coefficient (n-octanol/water)	Not available	**Vapor Pressure**	Not available
Boiling Point	Not applicable	**Autoignition Temperature**	Not applicable
Flash Point	Not applicable	**Melting Point**	Not applicable
Flammability Limits in Air	**Upper** Not available	**Lower** Not available	
Explosion Limits	**Upper** Not applicable	**Lower** Not applicable	

10. STABILITY AND REACTIVITY

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

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Sirolimus

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

Ethanol

LD50 Oral	3450 mg/kg mice 7060 mg/kg rats
Acute Dermal Irritation	Moderate irritation effect in rabbits.
Primary Eye Irritation	Severely irritating to rabbit eyes.
Sensitization	Not applicable

Multiple Dose Toxicity

Sirolimus

No Toxicologic Effect Dose/Species/Study Length:	See below

Ethanol

No Toxicologic Effect Dose/Species/Study Length:	Repeated contact can dry the skin with cracking, peeling, and itching. Repeated high exposure may affect the liver and nervous system.

Maximum Tolerated Dose (MTD), Oral

Sirolimus

Carcinogenicity	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.
Genetic Toxicity	Negative in a battery of genotoxicity tests.
Reproductive Toxicity	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.
Developmental Toxicity	No teratogenic effects were observed in rats or rabbits.

Ethanol

Carcinogenicity	No data available

Genetic Toxicity	May cause genetic changes.
Reproductive Toxicity	See Developmental Toxicity.
Developmental Toxicity	Repeated exposure may cause spontaneous abortions, as well as birth defects and other developmental problems (fetal alcohol syndrome).

Sirolimus

Target Organ(s) of Toxicity	No data available

Ethanol

Target Organ(s) of Toxicity	No data available

12. ECOLOGICAL INFORMATION

Chemical Fate Information

Sirolimus

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

Ecotoxicity

Sirolimus

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

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local and national regulations.

14. TRANSPORT INFORMATION

Transport Information This material is not classified as hazardous for transport.

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

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

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End of MSDS