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SAFETY DATA SHEET

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product Identifier

Product Name: Cyclosporine capsule premix

Synonyms: Premix for Cyclosporine Capsules

Drug Code Number: 74848

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: Pharmaceuticals

1.3 Details of the supplier of the safety data sheet

Supplier: AbbVie Inc.

1 North Waukegan Road North Chicago, IL 60064

USA

1-800-255-5162 +1-847-937-7433

Customer Service Telephone: 1-800-255-5162 (US and Canada only)

+1-847-937-7433

E-mail Address: AbbVie.SDS@abbvie.com

1.4 Emergency telephone number

Emergency Telephone: CHEMTREC: 1(800) 424-9300 (in USA and Canada)

or +1-703-527-3887 (international)

Section 2. Hazards identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008

Reproductive toxicityCarcinogenicity
Category 1A
Category 1A

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Risk Phrases: R45 - May cause cancer

R60 - May impair fertility

R61 - May cause harm to the unborn child

2.2 Label elements

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Section 2. Hazards identification



Signal Word: Danger

Hazard Statements: H350 - May cause cancer

H360 - May damage fertility or the unborn child

P201 - Obtain special instructions before use

P202 - Do not handle until all safety precautions have been read and understood

P281 - Use personal protective equipment as required

P308 + P313 - IF exposed or concerned: Get medical advice/attention

P405 - Store locked up

P501 - Dispose of contents/container to an approved waste disposal plant

2.3 Other hazards

Not determined

Section 3. Composition/information on ingredients

Chemical Name	Percent	EINECS/ELINCS Number	EEC Classification	EU - GHS Substance Classification	REACH No.
Castor Oil 8001-79-4	30-50	Present		Not Hazardous*	No data available
Sorbitan Monooleate 1338-43-8	5-20	Present		Not Hazardous*	No data available
Cyclosporine 59865-13-3	5-20	NA	Xn, R22 R45 R60, R61	Acute Tox. 4 (H302) Carc 1B (H350) Repr. 1B (H360)	No data available
Ethanol 64-17-5	5-20	Present	F; R11	Flam. Liq. 2 (H225)	No data available
Polyethylene Glycols 25322-68-3	5-20	NA		Not Hazardous*	No data available
Propylene Glycol 57-55-6	5-20	Present		Not Hazardous*	No data available

Not Hazardous* - Based on available data, not classified as hazardous according to the criteria of the Globally Harmonized System.

For the full text of the R-phrases mentioned in this Section, see Section 16
For the full text of the H-Statements mentioned in this Section, see Section 16

Section 4. First aid measures

4.1 Description of first aid measures

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Eve Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Skin Contact: Remove from source of exposure. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention. Provide

symptomatic/supportive care as necessary.

Inhalation: Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

Ingestion: Remove from source of exposure. If signs of toxicity occur, seek medical attention.

Provide symptomatic/supportive care as necessary.

Protection of First-aiders: Use personal protective equipment

4.2 Most important symptoms and effects, both acute and delayed

Signs and Symptoms: Clinical data suggests the following: abnormal kidney function, tremor, hirsutism

(abnormal hairiness), gastrointestinal upset, rash, increased blood pressure, abnormal

liver function, excessive urination, convulsion, alterations in blood chemistry.

Medical Conditions Data suggest any pre-existing ailments in the following organs: immune system,

Aggravated by Exposure: kidney, central nervous system, cardiovascular system, liver. Pregnancy.

4.3 Indication of any immediate medical attention and special treatment needed

Notes To Physician: Treat symptomatically

Section 5. Firefighting measures

5.1 Extinguishing Media

Suitable Extinguishing Media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable Extinguishing Media: Not determined

5.2 Special hazards arising from the substance or mixture

Special Exposure Hazards: Not determined

5.3 Advice for firefighters

Protective Equipment and As in any fire, wear self-contained breathing apparatus and full protective gear

Precautions for Firefighters:

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: Use personal protective equipment identified in Section 8. Remove all sources of

ignition.

6.2. Environmental precautions

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Environmental Precautions: Contain material and prevent release to waterways or soil.

6.3. Methods and material for containment and cleaning up

Methods for Cleaning Up: Keep away from ignition sources. Recover product and place in an appropriate

container for disposal.

6.4. Reference to other sections

Refer to Sections 8, 12, and 13 for further information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition. Bond and ground containers during transfer operations..

7.2. Conditions for safe storage, including any incompatibilities

Store according to label instructions

7.3. Specific end use(s)

Recommended use: Pharmaceuticals

Section 8. Exposure controls/personal protection

8.1. Control parameters

Exposure limits:

Chemical Name	Employee Exposure Limit	Skin Notation
Castor Oil 8001-79-4	Not Applicable	None
Sorbitan Monooleate 1338-43-8	Not Applicable	None
Cyclosporine 59865-13-3	0.2 mg/m³ TWA	None
Ethanol 64-17-5	1,900 mg/m ³	None
Polyethylene Glycols 25322-68-3	Not Applicable	None
Propylene Glycol 57-55-6	Not Applicable	None

Chemical Name	ACGIH TLV	France	German MAK	Ireland	Italy
Ethanol	1000 ppm STEL	STEL: 9500 mg/m ³	960 mg/m³ TWA	1000 ppm (STEL)	
64-17-5		TWA: 1900 mg/m ³			
Polyethylene Glycols 25322-68-3			1000 mg/m³ TWA		
Propylene Glycol 57-55-6				150 ppm (TWA) 470 mg/m³ (TWA) 10 mg/m³ (TWA)	

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Chemical Name	The Netherlands	Spain	Switzerland	UK OEL/MEL
Ethanol	1900 mg/m ³ (STEL)	1910 mg/m ³ (TWA)	960 mg/m ³ (TWA)	3000 ppm (STEL)
64-17-5	$260 \text{ mg/m}^3 \text{ (TWA)}$		1920 mg/m ³ (STEL)	5760 mg/m ³ (STEL)
				3000 ppm (STEL)
				1000 ppm (TWA)
				$1920 \text{ mg/m}^3 \text{ (TWA)}$
Polyethylene Glycols 25322-68-3			1000 ppm (TWA)	
Propylene Glycol				450 ppm (STEL)
57-55-6				1422 mg/m ³ (STEL)
				$30 \text{ mg/m}^3 \text{ (STEL)}$
				150 ppm (TWA)
				$474 \text{ mg/m}^3 \text{ (TWA)}$
				$10 \text{ mg/m}^3 \text{ (TWA)}$

8.2. Exposure controls

Engineering Controls: Local exhaust ventilation as necessary to maintain exposures to within applicable

limits.

Respiratory Protection: An approved respirator (i.e. NIOSH, EN, etc.) should be worn when exposures are

expected to exceed the applicable limits.

Eyes: Wear eye protection appropriate to handling activities.

Gloves: Impervious gloves.

Other PPE Data: Wear appropriate body coverings if contact may occur.

Environmental Exposure

Controls:

Not determined

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance: Off-White MIxture Blend Yellow Viscous solution

Odor: Alcohol odor.
Odor Threshold: Not determined
pH: Not determined.
Boiling Pt. @ 760 mm Hg (°C): Not determined.
Melting/Freezing Point (°C): Not determined

Flash Point ($^{\circ}$ C): 29.4

Flash Point Method: Tag Closed Cup (TCC)

Evaporation Rate at 20°C: Not determined. Not determined. Flammability (Solid): Not determined. **Lower Explosive Limit: Upper Explosive Limit:** Not determined. Vapor Pressure (mm Hg): Not determined. Vapor Density (Air = 1): Not determined. **Specific Gravity:** Not determined. **Solubility(ies):** Not determined. Partition coefficient: n-Not determined.

octanol/water

Autoignition Temp. (°C): Not determined. **Decomposition temperature** (°C): Not determined.

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Viscosity (centipoise): Not determined. Explosion Severity: Not determined. Oxidizer Properties: Not determined.

9.2. Other information

Not determined

Section 10. Stability and reactivity

10.1. Reactivity

Not determined

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous reactions: Not determined.

10.4. Conditions to avoid

Keep away from open flames, hot surfaces and sources of ignition

10.5 Incompatible materials

Not determined

10.6 Hazardous decompostion products

Carbon oxides, Nitrogen oxides (NOx)

Section 11. Toxicological information

11.1. Information on toxicological effects

Routes of Exposure:

Oral: Unlikely
Dermal: Yes
Inhalation: Unlikely

Acute Toxicity - Oral: Data for component (s) given below.

Chemical Name	Acute Test	Value	Units	Species
Sorbitan Monooleate 1338-43-8	LD50 >	15,000	mg/kg	Rats
Cyclosporine	LD50 =	1480	mg/kg	Rats
59865-13-3		2329		Mice
	LD50 >	1000		Rabbits
		1000		Hamsters
Ethanol	LD50 =	3450	mg/kg	Mice
64-17-5		6300		Rabbits
		7060		Rats
		5560		Guinea Pigs
Polyethylene Glycols 25322-68-3	LD50 =	33,750	mg/kg	Rats
Propylene Glycol 57-55-6	LD50 =	10,000-33,700	mg/kg	Animals

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Acute Toxicity - Dermal: Data for component (s) given below.

Chemical Name	Acute Test	Value	Units	Species	
Polyethylene Glycols 25322-68-3	LD50 >	20,000	mg/kg	Rabbits	
Propylene Glycol 57-55-6	LD50 =	20,800	mg/kg	Rabbits	

Acute Toxicity - Inhalation: Not determined.

Other Toxicology Data: Data for component (s) given below:

Chemical Name	Test Type	Value	Units	Species	Comments
Cyclosporine	LD50 (sc) =	286	mg/kg	Rats	
59865-13-3	LD 50 (iv) >	10-148	mg/kg	Mice	
				Rabbits	
				Rats	

Corrosivity: Not determined.

Dermal Irritation: Not determined.

Eye Irritation: Not determined.

Sensitization: Not determined.

Toxicokinetics/Metabolism: Not determined.

Target Organ Effects: Data for component (s) given below.

Chemical Name	Target	Species	Dosage	Units	Route	Duration	
	Organs:						
Cyclosporine	Kidney	Rats	45	mg/kg	Oral	13 weeks	
59865-13-3	Gastrointestinal	Monkeys	60				
	Tract Liver	Dogs	45			52 weeks	
	Lymphatic system						
	Bone Marrow						
	Immune System						

Reproductive Effects: Active Ingredient: In clinical use target organ effects include: reduced fetal growth.

In animals adverse reproductive effects include: testicular atrophy, embryo toxicity,

Data for component (s) given below.

Chemical Name	Species	Dosage	Units	Route	Duration
Cyclosporine	Rats	15	mg/kg	Oral	Premating in Males During Gestation
59865-13-3	Rabbits				

Carcinogenicity: Active ingredient: In clinical use produced tumors in the following tissue (s):

lymphatic system. In animals produced tumors in the following tissue (s): lymphatic

system, kidney.

Data for component(s) given below.

Chemical Name	Site of Tumors	Species	Dosage	Route	Units	Duration
Cyclosporine	Lymphatic system Kidney	Mice	7.5	Oral	mg/kg	Lifetime
59865-13-3		Rats				

Mutagenicity: Data for component (s) given below.

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Chemical Name	Micronucleus Assay	Ames Test:	Mouse Lymphoma Assav	Chromosomal Abbr. Assav
Cyclosporine 59865-13-3	Negative	Negative	No Data.	Negative

Aspiration hazard: Not determined

Notes:

- 1. ALD: Approximate lethal dosage
- 2. LC50: Concentration in air that produces 50% mortality
- 3. LD50: Oral or dermal dosage that produces 50% mortality

Section 12. Ecological information

12.1. Toxicity

Not determined.

12.2. Persistence and degradability

Not determined.

12.3. Bioaccumulative potential

Not determined

12.4. Mobility in soil

Not determined.

12.5. Results of PBT or vPvB assessment

Chemical safety report is not required for this substance/product.

12.6. Other adverse effects

Do not allow undiluted material or large quantities to reach groundwater, bodies of water or sewer system.

Notes:

- 1. EC50: Concentration in water that produces 50% mortality in Daphnia sp.
- 2. LC50: Concentration in water that produces 50% mortality in fish.
- 3. EbC50/ErC50: Concentration in water that produces 50% inhibition of growth and in algae.

Section 13. Disposal considerations

13.1 Waste treatment methods

Waste Disposal Methods: Disposal should be made in accordance with country, federal, state and local

regulations.

Section 14. Transport information

ADR, DOT, ICAO/IATA, IMDG/IMO

Status: Regulated

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14.1. UN Number: UN1170

14.2. Proper shipping name: Ethanol mixture

14.3. Hazard class: 3 14.4. Packing group: III

14.5. Environmental hazard: Not applicable
14.6. Special Provisions: Not applicable
14.7. Transport in bulk according Not applicable

to Annex II of MARPOL 73/78

and the IBC Code:

Section 15. Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories

Chemical Name	EINECS/ ELINCS	TSCA	DSL	NDSL	PICCS
Castor Oil	Present	X	X	Not listed.	X
8001-79-4					
Sorbitan Monooleate	Present	X	X	Not listed.	X
1338-43-8					
Cyclosporine	-	-	X	Not listed.	-
59865-13-3					
Ethanol	Present	X	X	Not listed.	X
64-17-5					
Polyethylene Glycols	-	X	X	Not listed.	X
25322-68-3					
Propylene Glycol	Present	X	X	Not listed.	X
57-55-6					

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Castor Oil 8001-79-4	Present	-	X	X	Present	
Sorbitan Monooleate 1338-43-8	Present	-	X	X	Present	
Cyclosporine 59865-13-3	-	-	X	-	-	
Ethanol 64-17-5	Present	-	X	X	Present	HSR001144
Polyethylene Glycols 25322-68-3	Present	-	X	X	Present	
Propylene Glycol 57-55-6	Present	Present	X	X	Present	

Legend

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

 $\pmb{DSL/NDSL}\ -\ Canadian\ Domestic\ Substances\ List/Non-Domestic\ Substances\ List/Non-Dom$

PICCS - Philippines Inventory of Chemicals and Chemical Substances

ENCS - Japan Existing and New Chemical Substances

ISHL - Japan Industrial Safety and Health Law

IECSC - China Inventory of Existing Chemical Substances **AICS** - Australian Inventory of Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

Carcinogenicity Rating:

Chemical Name	Percent	NTP:	IARC:	ACGIH:
Castor Oil	30-50	Not Listed	Not Listed	Not Listed

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Chemical Name	Percent	NTP:	IARC:	ACGIH:
Sorbitan Monooleate	5-20	Not Listed	Not Listed	Not Listed
Cyclosporine	5-20	Not Listed	Listed	Not Listed
Ethanol	5-20	Not Listed	Not Listed	Not Listed
Polyethylene Glycols	5-20	Not Listed	Not Listed	Not Listed
Propylene Glycol	5-20	Not Listed	Not Listed	Not Listed

SARA 313 Information

Chemical Name	Percent	SARA 313 Chemical: CERCLA RQ/SARA		SARA EHS TPQ (lbs):
			EHS RQ (lbs):	
Castor Oil	30-50	No	Not Applicable	Not applicable
Sorbitan Monooleate	5-20	No	Not Applicable	Not applicable
Cyclosporine	5-20	No	Not Applicable	Not applicable
Ethanol	5-20	No	Not Applicable	Not applicable
Polyethylene Glycols	5-20	No	Not Applicable	Not applicable
Propylene Glycol	5-20	No	Not Applicable	Not applicable

Immediate Health:YesDelayed Health:YesFire:YesSudden Pressure:NoReactivity:No

RCRA Status: Not determined.

Proposition 65 Status: Chemicals known to the State of California to cause cancer or reproductive harm

listed below.

Chemical Name	Percent	Proposition 65 Listed Materials
Cyclosporine	5-20	Cancer

WHMIS Hazard Class: Not determined.

NFPA Rating:

Health: 1 Fire: 3 Reactivity: 0

Notes:

- 1. SARA = Superfund Amendments and the Reauthorization Act.
- 2. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act.
- 3. FIFRA = Federal Insecticide, Fungicide and Rodenticide Act.
- 4. TSCA = Toxic Substances Control Act.
- 5. EC = European Community.
- 6. WHMIS = Canadian Workplace Hazardous Materials Information System.
- 7. UN GHS = United Nations Globally Harmonized System for Hazard Identification.

15.2. Chemical safety assessment

Chemical safety assessment has not been conducted on the substance/product.

Section 16. Other information

Risk Phrases: R45 - May cause cancer, R60 - May impair fertility, R61 - May cause harm to the

unborn child

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Full text of H-Statements referred to under sections 2 and 3

H302 - Harmful if swallowed, H350 - May cause cancer if swallowed, H360FD - May damage fertility. May damage the unborn child, H225 - Highly flammable liquid and vapor

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