abbvie

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Name: Cyclosporine capsules

Synonyms: Gengraf Capsules, 25mg; Gengraf Capsules, 100mg; Gengraf Capsules, 50 mg

Trade name: Gengraf

List Number: 6463 (25 mg capsule old list number); 6477 (50 mg capsule old list number); 6479 (100 mg capsule old list number)
3108 (25 mg capsule new list number); 0541 (50 mg capsule new list number); 3109 (100 mg capsule new list number)

Drug Code Number: 0074-6463-32 (25 mg capsule old drug code number); 0074-7269-32; (50 mg capsule old drug code number); 0074-6479-32 (100 mg capsule old drug code number)
(Gengraf 25 mg capsule new drug code number); 0074-0541-30 (50 mg capsule new drug code number); 0074-3109-32 (Gengraf 100 mg capsule new drug code number)

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
+1-847-932-7900

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
General Note AbbVie

Acute oral toxicity Category 4
Reproductive toxicity Category 1B
Carcinogenicity Category 1B

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

2.2. Label elements

Signal Word: Danger

Hazard Statements:
H226 - Flammable liquid and vapor
H302 - Harmful if swallowed
H335 - May cause respiratory irritation
H350 - May cause cancer
H360FD - May damage fertility. May damage the unborn child

Precautionary Statements
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	Weight-%	EINECS/ELINCS Number	EEC Classification	EU - GHS Substance Classification	REACH Reg. 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); Repro. 1B (H360FD)	No data available
Propylene Glycol 57-55-6	5-20	Present		Not Hazardous*	No data available
Polyethylene Glycols 25322-68-3	5-20	NA	Xi, R37	STOT SE 3 (H335)	No data available
Ethanol 64-17-5	5-20	Present	F; R11	Flam. Liq. 2 (H226)	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

Eye 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 Aggravated by Exposure Data suggest any pre-existing ailments in the following organs: immune system, kidney, central nervous system, cardiovascular system, liver skin, eyes or hematopoietic system. 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: Capsules contain a flammable mixture.

5.3. Advice for firefighters

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

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal Precautions: For personal protection see section 8.

6.2. Environmental precautions

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: 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.

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
Propylene Glycol 57-55-6	Not applicable	None
Polyethylene Glycols 25322-68-3	Not applicable	None
Ethanol 64-17-5	1,900 mg/m³	None

Chemical Name	ACGIH TLV	France	German MAK	Ireland	Italy

Propylene Glycol 57-55-6				450 ppm (STEL) 1410 mg/m³ (STEL) 30 mg/m³ (STEL) 150 ppm (TWA) 470 mg/m³ (TWA) 10 mg/m³ (TWA)	
Polyethylene Glycols 25322-68-3			1000 mg/m³ TWA 8000 mg/m³ Peak		
Ethanol 64-17-5	1000 ppm STEL	STEL: 5000 ppm STEL: 9500 mg/m³ TWA: 1000 ppm TWA: 1900 mg/m³	500 ppm TWA 960 mg/m³ TWA 1000 ppm Peak 1920 mg/m³ Peak	1000 ppm (STEL)	

Chemical Name	The Netherlands	Spain	Switzerland	UK OEL/MEL
Propylene Glycol 57-55-6				450 ppm (STEL) 1422 mg/m³ (STEL) 30 mg/m³ (STEL) 150 ppm (TWA) 474 mg/m³ (TWA) 10 mg/m³ (TWA)
Polyethylene Glycols 25322-68-3			1000 mg/m³ (TWA)	
Ethanol 64-17-5	1900 mg/m³ (STEL) 260 mg/m³ (TWA)	1000 ppm (STEL) 1910 mg/m³ (STEL)	500 ppm (TWA) 960 mg/m³ (TWA) 1000 ppm (STEL) 1920 mg/m³ (STEL)	3000 ppm (STEL) 5760 mg/m³ (STEL) 1000 ppm (TWA) 1920 mg/m³ (TWA)

8.2. Exposure controls

Engineering Controls: No special provisions are required under normal product use conditions. When handling bulk formulation, use in a well-ventilated area.

Respiratory Protection: Respiratory protection is not needed during normal product use. When handling the bulk formulation, an approved respirator (i.e. NIOSH, EN, etc.) should be worn when exposures are expected to exceed the applicable limits.

Eyes: Eye protection not needed during typical product use conditions. Wear eye protection as appropriate when handling the bulk formulation.

Gloves: Gloves not required during normal product use conditions. Wear impervious gloves when handling the bulk formulation.

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 Opaque Capsule
Odor: Not determined
Odor Threshold: Not determined
pH: Not determined
Boiling Pt. @ 760 mm Hg (°C): Not determined
Melting/Freezing Point (°C): Not determined
Flash Point (°C): Not determined
Evaporation Rate at 20°C: Not determined
Flammability (Solid): Not determined

Lower Explosive Limit:	Not determined
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-octanol/water	Not determined
Autoignition Temp. (°C):	Not determined
Decomposition temperature (°C):	Not determined
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

Not determined

10.5. Incompatible materials

Not determined

10.6. Hazardous decomposition products

Carbon oxides, Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Routes of Exposure:

Oral:	Clinical Route
Dermal:	Unlikely
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 59865-13-3	LD50 = LD50 >	1480 2329 1000 1000	mg/kg	Rats Mice Rabbits Hamsters
Propylene Glycol 57-55-6	LD50 =	10,000-33,700	mg/kg	Animals
Polyethylene Glycols 25322-68-3	LD50 =	47,000 28,000 33,750	mg/kg	Mice Rats Rats
Ethanol 64-17-5	LD50 =	3450 6300 7060 5560	mg/kg	Mice Rabbits Rats Guinea Pigs

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

Chemical Name	Acute Test	Value	Units	Species
Propylene Glycol 57-55-6	LD50 =	20,800	mg/kg	Rabbits
Polyethylene Glycols 25322-68-3	LD50 >	20,000	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 59865-13-3	LD50 (sc) = LD 50 (iv) >	286 10-148	mg/kg mg/kg	Rats 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 Organs:	Species	Dosage	Units	Route	Duration
Cyclosporine 59865-13-3	Kidney Gastrointestinal Tract Liver Lymphatic system Bone Marrow Immune System	Rats Monkeys Dogs	45 60 45	mg/kg	Oral	13 weeks 52 weeks
Polyethylene Glycols 25322-68-3	Lungs	Rats	567 mg/m^3		Inhalation	2 weeks

Reproductive Effects Active Ingredient : In clinical use adverse reproductive 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 59865-13-3	Rats Rabbits	15	mg/kg	Oral	Premating in Males During Gestation

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 59865-13-3	Lymphatic system Kidney	Mice Rats	7.5	Oral	mg/kg	Lifetime

Mutagenicity: Data for component (s) given below:

Chemical Name	Micronucleus Assay	Ames Test:	Mouse Lymphoma Assay	Chromosomal Abbr. Assay
Cyclosporine 59865-13-3	Negative	Negative	No Data.	Negative
Polyethylene Glycols 25322-68-3	No Data.	Negative	No Data.	No Data.

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

Chemical Name	Weight-%	48h EC50 (daphnia - mg/l) (48HLCD)	Species	Duration
Propylene Glycol 57-55-6	5-20	1000	Daphnia magna	48 Hours
Ethanol 64-17-5	5-20	9268 2		

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 and 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: Not regulated

14.1. UN number Not applicable
14.2. Proper shipping name: Not applicable
14.3. Hazard class: Not applicable
14.4. Packing group: Not applicable
14.5. Environmental hazard: Not applicable
14.6. Special provisions: Not applicable
14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

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 8001-79-4	Present	X	X	Not listed	X
Sorbitan Monooleate 1338-43-8	Present	X	X	Not listed	X
Cyclosporine 59865-13-3	-	-	X	Not listed	-
Propylene Glycol 57-55-6	Present	X	X	Not listed	X
Polyethylene Glycols 25322-68-3	-	X	X	Not listed	X
Ethanol 64-17-5	Present	X	X	Not listed	X

Chemical Name	ENCS	ISHL	IECSC	AICS	KECL	New Zealand
Castor Oil 8001-79-4	-	-	X	X	Present	
Sorbitan Monooleate 1338-43-8	Present	-	X	X	Present	
Cyclosporine 59865-13-3	-	-	X	-	-	

Propylene Glycol 57-55-6	Present	Present	X	X	Present	
Polyethylene Glycols 25322-68-3	Present	-	X	X	Present	
Ethanol 64-17-5	Present	-	X	X	Present	HSR001144

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
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
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	Weight-%	NTP:	IARC:	ACGIH:
Castor Oil	30-50	Not listed	Not listed	Not listed
Sorbitan Monooleate	5-20	Not listed	Not listed	Not listed
Cyclosporine	5-20	Known Human Carcinogen	Monograph 100A [2012] (listed under Ciclosporin); Monograph 50 [1990]	Not listed
Propylene Glycol	5-20	Not listed	Not listed	Not listed
Polyethylene Glycols	5-20	Not listed	Not listed	Not listed
Ethanol	5-20	Not listed	Monograph 100E [2012] (in alcoholic beverages); Monograph 96 [2010] (in alcoholic beverages)	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans

SARA 313 Information

Chemical Name	Weight-%	SARA 313 Chemical:	CERCLA RQ/SARA EHS RQ (lbs):	SARA EHS TPQ (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
Propylene Glycol	5-20	No	Not applicable	Not applicable
Polyethylene Glycols	5-20	No	Not applicable	Not applicable
Ethanol	5-20	No	Not applicable	Not applicable

Immediate Health: No
Delayed Health: No
Fire: Yes
Sudden Pressure: No
Reactivity: No

RCRA Status: Not determined

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

Component	Weight-%	Proposition 65 Listed Materials
Cyclosporine 59865-13-3 (5-20)	5-20	carcinogen, initial date 1/1/92
Ethanol 64-17-5 (5-20)	5-20	carcinogen, initial date 4/29/11 (in alcoholic beverages) developmental toxicity, initial date 10/1/87 (in alcoholic beverages)

WHMIS Hazard Class Not determined

NFPA Rating:
Health: 1

Fire: 1
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

Full text of H-Statements referred to under sections 2 and 3
H226 - Flammable liquid and vapor
H302 - Harmful if swallowed
H335 - May cause respiratory irritation
H350 - May cause cancer
H360FD - May damage fertility. May damage the unborn child

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