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

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Material Name: Doxycycline calcium oral suspension syrup

Trade Name: Vibramycin Chemical Family: Mixture

Intended Use: Pharmaceutical product used as antibiotic agent

2. HAZARDS IDENTIFICATION

Appearance: Raspberry-apple flavored syrup

Signal Word: DANGER

Statement of Hazard: May damage the unborn child.

Additional Hazard Information:

Short Term: May cause allergic reactions in susceptible individuals. Accidental ingestion may cause effects

similar to those seen in clinical use.

Known Clinical Effects: May cause permanent discoloration of teeth if used during tooth development. May cause

effects similar to those generally seen in clinical use of tetracyclines including gastrointestinal

irritation, nausea, vomiting, and diarrhea. Photosensitivity has been reported in some

individuals taking tetracyclines.

EU Indication of danger: Toxic to reproduction: Category 1

EU Hazard Symbols:



EU Risk Phrases:

R61 - May cause harm to the unborn child. Hazardous Substance. Non-Dangerous Goods.

Australian Hazard Classification (NOHSC):

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2. HAZARDS IDENTIFICATION

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warnings included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	%
Calcium chloride USP	10035-04-8	Not Listed	Not Listed	*
Doxycycline calcium	94088-85-4	302-088-9	Repr.Cat.1;R61	1
Glycerin, USP	56-81-5	200-289-5	Not Listed	*
Hydrogen chloride	7647-01-0	231-595-7	T; R23	**
			C; R35	
Magnesium aluminum silicate	1327-43-1	215-478-8	Not Listed	*
Sodium hydroxide	1310-73-2	215-185-5	C; R35	**
Sodium metabisulfite USP	7681-57-4	231-673-0	Xn; R22	<1.0
			R31	
			Xi; R41	

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	%
Apple flavor, artificial	NOT ASSIGNED	Not Listed	Not Listed	*
Butylparaben	94-26-8	202-318-7	Not Listed	*
Carmine	1328-60-5	215-527-3	Not Listed	*
Povidone	9003-39-8	Not Listed	Not Listed	*
Propylene glycol	57-55-6	200-338-0	Not Listed	*
Propylparaben	94-13-3	202-307-7	Not Listed	*
Rasberry flavor	NOT ASSIGNED	Not Listed	Not Listed	*
Simethicone emulsion	67762-90-7	Not Listed	Not Listed	*
Sorbitol	6706-59-8	Not Listed	Not Listed	*
Water, purified	7732-18-5	231-791-2	Not Listed	*

Additional Information:

** to adjust pH

* Proprietary

Ingredient(s) indicated as hazardous have been assessed under standards for workplace

safety.

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

4. FIRST AID MEASURES

Eye Contact: Flush with water while holding eyelids open for at least 15 minutes. Seek medical attention

immediately.

Skin Contact: Remove contaminated clothing. Flush area with large amounts of water. Use soap. Seek

medical attention.

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.

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Symptoms and Effects of Exposure: For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Identification and/or Section 11 - Toxicological Information.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Use carbon dioxide, dry chemical, or water spray.

Hazardous Combustion Products: Formation of toxic gases is possible during heating or fire.

Fire Fighting Procedures: During all fire fighting activities, wear appropriate protective equipment, including self-

contained breathing apparatus.

Fine / Explosion Hazards: Fine particles (such as dust and mists) may fuel fires/explosions.

6. ACCIDENTAL RELEASE MEASURES

Health and Safety Precautions: Personnel involved in clean-up should wear appropriate personal protective equipment (see

Section 8). Minimize exposure.

Measures for Cleaning / Collecting: Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean spill

area thoroughly.

Measures for Environmental

Protections:

Place waste in an appropriately labeled, sealed container for disposal. Care should be taken to

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avoid environmental release.

Additional Consideration for Large

Spills:

Non-essential personnel should be evacuated from affected area. Report emergency

situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

General Handling: Minimize generating airborne mists and vapors. Avoid breathing vapor or mist. When handling,

use appropriate personal protective equipment (see Section 8). Wash thoroughly after

handling. Releases to the environment should be avoided. Review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure or environmental releases. Potential points of process emissions of this material to the atmosphere should be controlled with dust collectors, HEPA filtration systems or other

equivalent controls.

Storage Conditions: Store as directed by product packaging.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Refer to available public information for specific member state Occupational Exposure Limits.

Doxycycline calcium

Pfizer OEL TWA-8 Hr: 0.25 mg/m³

Glycerin, USP

ACGIH Threshold Limit Value (TWA)

ACGIH OELs - Notice of Intended Changes

Australia TWA

Belgium OEL - TWA

Czech Republic OEL - TWA

Estonia OEL - TWA

Finland OEL - TWA

10 mg/m³

10 mg/m³

20 mg/m³

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France OEL - TW	ITROLS / PERSONAL	10 mg/m ³	
		50 mg/m³	
Germany (DFG) - Greece OEL - TW		10 mg/m³	
Ireland OEL - TW		10 mg/m ³	
OSHA - Final PEL		15 mg/m ³	
Poland OEL - TW		10 mg/m ³	
Portugal OEL - T\		10 mg/m ³	
Spain OEL - TWA	ı	10 mg/m³	
Hydrogen chloride			
ACGIH Ceiling Th	reshold Limit:	2 ppm	
Australia PEAK	noonora Emme.	5 ppm	
Australia i EAR		7.5 mg/m ³	
Austria OEL - MA	Ks	5 ppm	
7.430.14.022 1117.		8 mg/m ³	
Belgium OEL - TV	NA	5 ppm	
_0.g.u 0 11		8 mg/m ³	
Bulgaria OEL - TV	NA	8.0 mg/m ³	
Buigana OLL 11		5 ppm	
Cyprus OEL - TW	/ A	5 ppm	
Oyp. 40 022 111		8 mg/m ³	
Czech Republic C	OFI - TWΔ	8 mg/m ³	
Estonia OEL - TW		5 ppm	
20101114 022 171		8 mg/m ³	
Germany - TRGS	900 - TWΔs	2 ppm	
comany mos	111/16	3 mg/m ³	
Germany (DFG) -	MAK	2 ppm	
cormany (Er c)		3.0 mg/m ³	
Greece OEL - TW	'Δ	5 ppm	
0.0000 022 111		7 mg/m ³	
Hungary OEL - T\	NΔ	8 mg/m ³	
Ireland OEL - TW		5 ppm	
ireland OLL - 144	д3	8 mg/m ³	
Italy OEL - TWA		5 ppm	
italy OLL - IVVA		8 mg/m ³	
Japan - OELs - Co	eilings	5 ppm	
Jupun - OLLS - Ol	J93	7.5 mg/m ³	
Latvia OEL - TWA	\	5 ppm	
	•	8 mg/m ³	
Lithuania OEL - T	WA.	5 ppm	
		8 mg/m ³	
Luxembourg OEL	- TWA	5 ppm	
Luxonibourg OLL		8 mg/m ³	
Malta OEL - TWA		5 ppm	
ana VEL TVA		8 mg/m ³	
Netherlands OEL	- TWA	8 mg/m ³	
Poland OEL - TW		5 mg/m ³	
Romania OEL - TV		5 mg/m 5 ppm	
Nomania VEL - I	110	8 mg/m ³	
Slovakia OEL - T\	MΔ	5 mg/m 5 ppm	
SIUVANIA UEL - II	! '^	5 ррпі 8.0 mg/m³	
		-	
Slovenia OEL - T\	WΔ	5 ppm	

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Spain OEL - TWA 5 ppm

7.6 mg/m³

Propylene glycol

Australia TWA 150 ppm

474 mg/m³ 10 mg/m³

Ireland OEL - TWAs150 ppm
470 mg/m³

10 mg/m³

1 mg/m³

Latvia OEL - TWA 7 mg/m³ Lithuania OEL - TWA 7 mg/m³

Sodium hydroxide

ACGIH Ceiling Threshold Limit: 2 mg/m³ **Australia PEAK** 2 mg/m³ 2 mg/m³ **Austria OEL - MAKs Bulgaria OEL - TWA** 2.0 mg/m³ Czech Republic OEL - TWA 1 mg/m^3 Estonia OEL - TWA 1 mg/m^3 France OEL - TWA 2 mg/m³ **Greece OEL - TWA** 2 mg/m³ 2 mg/m^3 **Hungary OEL - TWA** 2 mg/m^3 Japan - OELs - Ceilings 0.5 mg/m³ Latvia OEL - TWA **OSHA - Final PELS - TWAs:** 2 mg/m³ 0.5 mg/m³ **Poland OEL - TWA** 2 mg/m³ Slovakia OEL - TWA 2 mg/m^3 Slovenia OEL - TWA

Sodium metabisulfite USP

Sweden OEL - TWAs

ACGIH Threshold Limit Value (TWA) 5 mg/m³ **Australia TWA** 5 mg/m³ 5 mg/m^3 **Belgium OEL - TWA** 5 mg/m^3 **Denmark OEL - TWA** France OEL - TWA 5 ma/m³ 5 mg/m^3 **Greece OEL - TWA** 5 mg/m³ Ireland OEL - TWAs 5 mg/m^3 Portugal OEL - TWA 5 mg/m³ Spain OEL - TWA

Analytical Method: Analytical method available for Doxycycline. Contact Pfizer Inc for further information.

Engineering Controls: Engineering controls should be used as the primary means to control exposures. General

room ventilation is adequate unless the process generates dust, mist or fumes. Keep airborne

contamination levels below the exposure limits listed above in this section.

Environmental Exposure Controls: Refer to specific Member State legislation for requirements under Community environmental

legislation.

Personal Protective Equipment: Refer to applicable national standards and regulations in the selection and use of personal

protective equipment (PPE).

Hands: Impervious gloves are recommended if skin contact with drug product is possible and for bulk

processing operations.

Eyes: Wear safety glasses or goggles if eye contact is possible.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Skin: Impervious protective clothing is recommended if skin contact with drug product is possible and

for bulk processing operations.

Respiratory protection: If the applicable Occupational Exposure Limit (OEL) is exceeded, wear an appropriate

respirator with a protection factor sufficient to control exposures to below the OEL.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:SyrupColor:RedOdor:Light rasberryMolecular Formula:Mixture

Molecular Weight: Mixture

Polymerization: Will not occur

10. STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions of use.

Conditions to Avoid: Fine particles (such as dust and mists) may fuel fires/explosions. **Incompatible Materials:** As a precautionary measure, keep away from strong oxidizers

11. TOXICOLOGICAL INFORMATION

General Information: The information in this section describes the hazards of various forms of the active ingredient.

The remaining information describes the potential hazards of the individual ingredients.

Acute Toxicity: (Species, Route, End Point, Dose)

Doxycycline calcium

Mouse Oral LD50 1900 mg/kg (hydrochloride) Rat Oral LD50 > 2000 mg/kg (hydrochloride)

Propylparaben

Mouse Oral LD 50 6332 mg/kg

Mouse Sub-tenon injection (eye) LD 50 200 mg/kg

Calcium chloride USP

Rat Oral LD50 1000 mg/kg Mouse Oral LD50 1940 mg/kg

Glycerin, USP

Mouse Oral LD50 4090 mg/kg Rat Oral LD50 12.6 g/kg

Rabbit Dermal LD50 > 10 g/kg

Rat Inhalation LC50 1hr > 570 mg/m³

Rat Dermal LD 50 > 21.9 g/kg

Povidone

Rat Oral LD50 100 g/kg

Propylene glycol

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11. TOXICOLOGICAL INFORMATION

Mouse Oral LD50 22,000 mg/kg Rat Oral LD50 20,000 mg/kg Rabbit Dermal LD50 20,800 mg/kg

Hydrogen chloride

Rat Sub-tenon injection (eye) LC50 1H 3,124 ppm

Mouse Inhalation LC50 1H 1,108 ppm

Mouse Oral LD50 900 mg/kg

Sodium hydroxide

Mouse IP LD50 40 mg/kg

Doxycycline hydrochloride

Rat Oral LD50 1700 mg/kg

Mouse Oral LD50 1890 mg/kg

Dog Oral LD50 > 500 mg/kg

Rat IV LD50 137 mg/kg

Rat Subcutaneous LD50 700 mg/kg

Kat Subcutaneous LD50 700 mg/kg

Acute Toxicity Comments: A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable

at the highest dose used in the test.

Irritation / Sensitization: (Study Type, Species, Severity)

Glycerin, USP

Eye Irritation Rabbit Mild

Propylene glycol

Skin Irritation Rabbit Mild Eye Irritation Rabbit Mild

Sodium hydroxide

Eye Irritation Rabbit Severe Skin Irritation Rabbit Severe

Skin Irritation / Sensitization Photosensitivity manifested by an exaggerated sunburn reaction has been observed in some

individuals taking tetracyclines.

Repeated Dose Toxicity: (Duration, Species, Route, Dose, End Point, Target Organ)

Propylparaben

3 Week(s) Rat Oral 27.1 g/kg LOAEL Endocrine system

4 Week(s) Rat Oral 347.2 mg/kg LOAEL Male reproductive system

Doxycycline monohydrate

30 Day(s) Rat Oral 500 mg/kg/day NOEL No effects at maximum dose

18 Month(s) Rat Oral 500 mg/kg/day NOAEL None identified

1 Year(s) Dog Oral 100 mg/kg/day LOEL Liver

Reproduction & Development Toxicity: (Duration, Species, Route, Dose, End Point, Effect(s))

Doxycycline monohydrate

Reproductive & Fertility Rat Oral 250 mg/kg/day NOAEL No effects at maximum dose Embryo / Fetal Development Monkey Oral 50 mg/kg/day NOAEL Not Teratogenic

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11. TOXICOLOGICAL INFORMATION

Carcinogen Status: None of the components of this formulation are listed as a carcinogen by IARC, NTP or OSHA.

Povidone

IARC: Group 3 (Not Classifiable)

Hydrogen chloride

IARC: Group 3 (Not Classifiable)

Sodium metabisulfite USP

IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

Environmental Overview:The environmental characteristics of this material have not been fully evaluated. Releases to

the environment should be avoided.

Aquatic Toxicity: (Species, Method, End Point, Duration, Result)

Glycerin, USP

Oncorhynchus mykiss (Rainbow Trout) LD50 96 Hours 50 mg/L Daphnia magna (Water Flea) EC50 24 Hours >500 mg/L

Aquatic Toxicity Comments: A greater than symbol (>) indicates that aquatic toxicity was not observed at the maximum

dose tested.

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods: Dispose of waste in accordance with all applicable laws and regulations. Member State

specific and Community specific provisions must be considered. Considering the relevant known environmental and human health hazards of the material, review and implement appropriate technical and procedural waste water and waste disposal measures to prevent occupational exposure and environmental release. It is recommended that waste minimization be practiced. The best available technology should be utilized to prevent environmental releases. This may include destructive techniques for waste and wastewater.

14. TRANSPORT INFORMATION

The following refers to all modes of transportation unless specified below.

Not regulated for transport under USDOT, EUADR, IATA, or IMDG regulations.

15. REGULATORY INFORMATION

EU Symbol:

EU Indication of danger: Toxic to reproduction: Category 1

EU Risk Phrases:

R61 - May cause harm to the unborn child.

EU Safety Phrases:

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15. REGULATORY INFORMATION

S53 - Avoid exposure - obtain special instructions before use.

OSHA Label:

DANGER

May damage the unborn child.

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision A



Apple flavor, artificial

California Proposition 65 Not Listed

Butylparaben

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
202-318-7

Calcium chloride USP

California Proposition 65Not ListedAustralia (AICS):Present

Carmine

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Present
EU EINECS/ELINCS List
215-527-3

Doxycycline calcium

California Proposition 65 developmental toxicity initial date 1/1/92 internal use

EU EINECS/ELINCS List 302-088-9

Glycerin, USP

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):

Not Listed
Present
Present

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15. REGULATORY INFORMATION

REACH - Annex V - Exemptions from the

obligations of Register:

Present if not chemically modified, except they meet the criteria for classification as dangerous according to Directive 67/548/EEC, except those only classified as flammable [R10], as a skin irritant [R38] or as an eye irritant [R36], except they are persistent, bioaccumulative, and toxic or very persistent and very bioaccumulative in accordance with the criteria set out in Annex XIII, except they were identified in accordance with Article 59[1] at least two years previously as substances giving rise to an equivalent level of concern

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200-289-5

231-595-7

EU EINECS/ELINCS List

Hydrogen chloride

CERCLA/SARA 313 Emission reporting 1.0 % CERCLA/SARA Hazardous Substances 5000 lb and their Reportable Quantities: 2270 kg **CERCLA/SARA - Section 302 Extremely Hazardous** 500 lb

TPQs

CERCLA/SARA - Section 302 Extremely Hazardous 5000 lb

Substances EPCRA RQs California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present Standard for the Uniform Scheduling Schedule 5 for Drugs and Poisons: Schedule 6

EU EINECS/ELINCS List

Magnesium aluminum silicate

California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present **EU EINECS/ELINCS List** 215-478-8

Povidone

California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present

Propylene glycol

California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present **EU EINECS/ELINCS List** 200-338-0

Propylparaben

California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present **EU EINECS/ELINCS List** 202-307-7

Rasberry flavor

Not Listed **California Proposition 65**

Simethicone emulsion

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California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present

Sodium hydroxide

CERCLA/SARA Hazardous Substances 1000 lb and their Reportable Quantities: 454 ka California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present Standard for the Uniform Scheduling Schedule 5 for Drugs and Poisons: Schedule 6 **EU EINECS/ELINCS List** 215-185-5

Sodium metabisulfite USP

California Proposition 65 Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present Standard for the Uniform Scheduling Schedule 5 for Drugs and Poisons: **EU EINECS/ELINCS List** 231-673-0

Sorbitol

Not Listed **California Proposition 65**

Water, purified

Not Listed **California Proposition 65** Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present **REACH - Annex IV - Exemptions from the** Present obligations of Register: **EU EINECS/ELINCS List** 231-791-2

16. OTHER INFORMATION

Text of R phrases mentioned in Section 3

R61 - May cause harm to the unborn child.

R22 - Harmful if swallowed.

R23 - Toxic by inhalation.

R35 - Causes severe burns.

R31 - Contact with acids liberates toxic gas.

R41 - Risk of serious damage to eyes.

Data Sources: Pfizer proprietary drug development information. Safety data sheets for individual ingredients.

Reasons for Revision: Updated Section 2 - Hazard Identification. Updated Section 6 - Accidental Release Measures.

Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 11 - Toxicology Information. Updated Section 13 - Disposal Considerations. Updated Section 15 - Regulatory Information. Updated Section 3 - Composition / Information on Ingredients. Updated Section 4

- First Aid Measures. Updated Section 5 - Fire Fighting Measures. Updated Section 7 -

Handling and Storage. Updated Section 10 - Stability and Reactivity.

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Product Stewardship Hazard Communication

Prepared by: Pfizer Global Environment, Health, and Safety Operations

Pfizer Inc believes that the information contained in this Material Safety Data Sheet is accurate, and while it is provided in good faith, it is without warranty of any kind, expressed or implied. If data for a hazard are not included in this document there is no known information at this time.

End of Safety Data Sheet