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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name Docetaxel Injection, USP (Hospira, Inc.)

Product Code(s) PZ03238
Trade Name: Taxespira
Chemical Family: Not determined

Contains Docetaxel anhydrous

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

Recommended Use Antineoplastic

1.3. Details of the supplier of the safety data sheet

Hospira, A Pfizer Company
275 North Field Drive
Lake Forest, Illinois 60045
Hospira UK Limited
Horizon
Honey Lane

1-800-879-3477 Hurley

Maidenhead, SL6 6RJ United Kingdom

1.4. Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300 International Chemtrec (24 hours):+1-703-527-3887

E-mail address pfizer-MSDS@pfizer.com

Emergency Telephone - Poisons Information Centre: 13 1126

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Serious eye damage/eye irritationCategory 2 - (H319)Germ cell mutagenicityCategory 2 - (H341)Reproductive toxicityCategory 1B - (H360D)Effects on or via lactationYes - (H362)

2.2. Label elements

Signal word Danger

Hazard statements H319 - Causes serious eye irritation

H341 - Suspected of causing genetic defects H360D - May damage the unborn child H362 - May cause harm to breast-fed children

Precautionary Statements P280 - Wear protective gloves/protective clothing/eye protection/face protection

P201 - Obtain special instructions before use

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

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

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P263 - Avoid contact during pregnancy/while nursing



2.3. Other hazards Other hazards

An Occupational Exposure Value has been established for one or more of the ingredients (see Section 8).

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.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Hazardous

Chemical Name	EC No	CAS No	Weight-%	Classification REACH	
				according to	Registration
				Regulation (EC) No.	Number
				1272/2008 [CLP]	
Polyethylene glycol	Not Listed	25322-68-3	*	Not Listed	
Ethyl alcohol (ethanol)	200-578-6	64-17-5	<20	Flam. Liq. 2 (H225)	
Docetaxel anhydrous	Not Listed	114977-28-5	1	Repr. 1B (H360D)	
				Muta. 2 (H341)	
				Eye Irrit. 2A (H319)	
				Lact. (H362)	
Citric acid	201-069-1	77-92-9	**	Eye Irrit. 2A (H319)	
NonHazardous					
Chemical Name	EC No	CAS No	Weight-%	Classification	REACH
				according to	Registration
				Regulation (EC) No.	Number
				1272/2008 [CLP]	

Full text of H- and EUH-phrases: see section 16

Additional information

Polysorbate 80

* Proprietary

500-019-9

** to adjust pH

Ingredient(s) indicated as hazardous have been assessed under standards for workplace safety. In accordance with 29 CFR 1910.1200, the exact percentage composition of this

Not Listed

mixture has been withheld as a trade secret.

9005-65-6

Section 4: FIRST AID MEASURES

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4.1. Description of first aid measures

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Inhalation Remove to fresh air. Seek immediate medical attention/advice.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

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

medical attention. For information on potential delayed effects, see Section 2 - Hazards

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Identification and/or Section 11 - Toxicological Information.

Ingestion Clean mouth with water and drink afterwards plenty of water.

4.2. Most important symptoms and effects, both acute and delayed

Most important symptoms and

effects

For information on potential signs and symptoms of exposure, See Section 2 - Hazards

Identification and/or Section 11 - Toxicological Information.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians None.

Section 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media Dry chemical, CO2, alcohol-resistant foam or water spray.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

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

chemical

Hazardous combustion products Formation of toxic gases is possible during heating or fire.

5.3. Advice for firefighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

Section 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Personnel involved in clean-up should wear appropriate personal protective equipment (see

Section 8). Minimize exposure.

6.2. Environmental precautions

Environmental precautions Place waste in an appropriately labeled, sealed container for disposal. Care should be

taken to avoid environmental release.

6.3. Methods and material for containment and cleaning up

Methods for containment Keep away from incompatible materials.

Methods for cleaning up Contain the source of spill if it is safe to do so. Collect spill with absorbent material. Clean

spill area thoroughly.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sectionsSee section 8 for more information. See section 13 for more information.

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Section 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Advice on safe handling

Flammable liquid and vapor- keep away from ignition sources and clean up spills promptly. Eliminate possible ignition sources (e.g., heat, sparks, flame, impact, friction, electricity), and follow appropriate grounding and bonding procedures. Avoid contact with eyes, skin, and clothing. Use appropriate personal protective equipment. Wash thoroughly after handling. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash thoroughly after handling. Wash hands and any exposed skin after removal of PPE. 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.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Store as directed by product packaging.

7.3. Specific end use(s)

Specific use(s) Pharmaceutical product used as. Antineoplastic.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure Limits

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

Polyethylene glycol

Austria 1000 mg/m³ STEL 4000 mg/m³ Denmark 1000 mg/m³

Germany 200 mg/m³ average molecular weight 200-600; because formation

of a mist is possible, exposure should be minimized for reasons

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of occupational safety and hygiene

Ceiling / Peak: 400 mg/m³

 Germany
 1000 mg/m³

 Russia
 MAC: 10 mg/m³

 Slovakia
 1000 mg/m³

 Switzerland
 1000 mg/m³

Ethyl alcohol (ethanol)

Bulgaria

Denmark

ACGIH TLV STEL: 1000 ppm

Austria 1000 ppm 1900 mg/m³ STEL 2000 ppm

STEL 2000 ppm STEL 3800 mg/m³ 1000 mg/m³ 1000 mg/m³

Czech Republic 1000 mg/m³
Ceiling: 3000 mg/m³

Estonia 1900 mg/m³ 500 ppm 1000 mg/m³

STEL: 1000 ppm STEL: 1900 mg/m³

Finland 1000 ppm

1900 ppin 1900 mg/m³

1000 ppm

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STEL: 1300 ppm STEL: 2500 mg/m³ 1900 mg/m³ 200 ppm

380 mg/m³

380 mg/m³

Ceiling / Peak: 800 ppm Ceiling / Peak: 1520 mg/m³ Page 5/11

Germany Ceiling / Peak: 1520 mg/r

 Hungary
 1900 mg/m³

 STEL: 7600 mg/m³

 Ireland
 STEL: 1000 ppm

 Latvia
 1000 mg/m³

Netherlands 260 mg/m³
STEL: 1000 mg/m³

STEL: 1900 mg/m³

H*

Poland 1900 mg/m³
Romania 1000 ppm
1900 mg/m³
STEL: 5000 ppm
STEL: 9500 mg/m³

Russia TWA: 1000 mg/m³ STEL: 2000 mg/m³

Slovakia 500 ppm 960 mg/m³

Spain STEL: 1000 ppm STEL: 1910 mg/m³

Switzerland 500 ppm

960 mg/m³ STEL: 1000 ppm STEL: 1920 mg/m³

OSHA PEL 1000 ppm 1900 mg/m³

(vacated) TWA: 1000 ppm (vacated) TWA: 1900 mg/m³

United Kingdom TWA: 1900 mg/m⁻¹

TWA: 1920 mg/m³ STEL: 3000 ppm STEL: 5760 mg/m³

Citric acid

France

Germany

Germany 2 mg/m³

Ceiling / Peak: 4 mg/m³

 Germany
 2 mg/m³

 Russia
 MAC: 1 mg/m³

 Switzerland
 2 mg/m³

 STEL: 4 mg/m³

Pfizer OEB Statement:

The purpose of the Occupational Exposure Band (OEB) classification system is to separate substances into different Hazard categories when the available data are sufficient to do so, but inadequate to establish an Occupational Exposure Limit (OEL). The OEB given is based upon an analysis of all currently available data; as such, this value may be subject to revision when new information becomes available.

Docetaxel anhydrous

Pfizer Occupational Exposure

Band (OEB):

8.2. Exposure controls

OEB 4 (control exposure to the range of 1ug/m³ to <10ug/m³)

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Engineering controlsEngineering 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

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Environmental exposure controls Personal protective equipment

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airborne contamination levels below the exposure limits listed above in this section. No information available.

Refer to applicable national standards and regulations in the selection and use of personal protective equipment (PPE). Contact your safety and health professional or safety equipment supplier for assistance in selecting the correct protective clothing/equipment based on an assessment of the workplace conditions, other chemicals used or present in the workplace and specific operational processes.

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Eye/face protection

Wear safety glasses or goggles if eye contact is possible. (Eye protection must meet the

standards in accordance with EN166, ANSI Z87.1 or international equivalent.).

Impervious disposable gloves (e.g. Nitrile, etc.) (double recommended) if skin contact with drug product is possible and for bulk processing operations. (Protective gloves must meet the standards in accordance with EN374, ASTM F1001 or international equivalent.).

Impervious disposable protective clothing is recommended if skin contact with drug product

is possible and for bulk processing operations. (Protective clothing must meet the standards in accordance with EN13982, ANSI 103 or international equivalent.).

Under normal conditions of use, 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 (e.g. particulate respirator with a full mask, P3 filter).

(Respirators must meet the standards in accordance with EN136, EN143, ASTM F2704-10

or international equivalent.).

Respiratory protection

Skin and body protection

Hand protection

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state Solution

Color Clear, colorless to pale yellow

Molecular formula (MF): Mixture Molecular weight Mixture

Odor No data available. **Odor threshold** No data available

Property Values_

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Melting point / freezing point No data available Boiling point / boiling range No data available

Flash point 16.1

Evaporation rate No data available Flammability (solid, gas) No data available Flammability Limit in Air

Upper flammability limit: No data available

Lower flammability limit: No data available

Vapor pressure No data available Vapor density No data available Relative density No data available Water solubility No data available Solubility(ies) No data available **Autoignition temperature** No data available No data available **Decomposition temperature** Kinematic viscosity No data available **Dynamic viscosity** No data available

Explosive properties Upper Explosive Limits (Liquid) (% by Vol.): 19 (ethanol) Lower Explosive Limits (Liquid) (% by Vol.): 3.3 (ethanol)

No information available

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Oxidizing properties No information available

9.2. Other information

Liquid DensityNo data availableBulk densityNo data available

Section 10: STABILITY AND REACTIVITY

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10.1. Reactivity

Reactivity No data available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact No data available.

Sensitivity to Static Discharge No data available.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No information available.

10.4. Conditions to avoid

Conditions to avoid Fine particles (such as dust and mists) may fuel fires/explosions.

10.5. Incompatible materials

Incompatible materialsAs a precautionary measure, keep away from strong oxidizers.

10.6. Hazardous decomposition products

Hazardous decomposition products No data available.

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

General Information: The information included in this section describes the potential hazards of the individual

ingredients

Short term May cause eye irritation (based on components)

Long Term: Repeat-dose studies in animals have shown a potential to cause adverse effects on central

nervous system, gastrointestinal system, blood and blood forming organs, and testes.

Known Clinical Effects: Common adverse effects include blood cell changes, nervous system/brain toxicity

(neurotoxicity). Serious allergic reactions, including anaphylaxis, have been reported.

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

Polysorbate 80

Rat Intravenous LD 50 1790 mg/kg Mouse Oral LD 50 25 g/kg

Ethyl alcohol (ethanol)

Mouse Oral LD50 3450 mg/kg
Rat Oral LD50 7060 mg/kg
Pat Inhalation I C50 10h 20 000

Rat Inhalation LC50 10h 20,000 ppm

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Rat Oral LD50 > 2000 mg/kg Mouse IV LD50 138 mg/kg

Citric acid

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Rat Oral LD50 3000 mg/kg

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Polyethylene glycol	= 22 g/kg (Rat) = 28 g/kg (Rat)	> 20 g/kg (Rabbit)	-
Polysorbate 80	= 34500 μL/kg (Rat)	-	-
Ethyl alcohol (ethanol)	= 7060 mg/kg (Rat)	-	= 124.7 mg/L (Rat)4 h
Citric acid	= 3 g/kg(Rat) = 3000 mg/kg(Rat)	> 2000 mg/kg (Rat)	-

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.

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

Polyethylene glycol

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

Ethyl alcohol (ethanol)

Eye Irritation Rabbit Severe Skin Irritation Rabbit Mild

Docetaxel anhydrous

Eye Irritation Rabbit Irritant
Skin Irritation Rabbit Non-irritating
Skin Sensitization Negative
Citric acid
Eye Irritation Rabbit Severe
Skin Irritation Rabbit Mild

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

28-31 Day(s) Rat Intravenous 0.3 mg/m2/day NOEL Blood forming organs, Male reproductive system 6 Month(s) Rat Intravenous 0.2 mg/kg/day NOEL Blood forming organs, Male reproductive system 6 Month(s) Dog Intravenous 0.375 mg/kg/day LOAEL Male reproductive system

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

Reproductive & Fertility Rat Intravenous 0.3 mg/kg/day LOAEL Paternal toxicity

Embryo / Fetal Development Rat Intravenous 0.3 mg/kg/day LOAEL Maternal Toxicity, Embryotoxicity, Fetotoxicity, Not Teratogenic

Embryo / Fetal Development Rabbit Intravenous 0.03

mg/kg/day Embryotoxicity, Fetotoxicity, Maternal Toxicity, Not Teratogenic

Genetic Toxicity: (Study Type, Cell Type/Organism, Result)

Docetaxel anhydrous

In Vitro Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative

In Vivo Micronucleus Mouse Positive

In Vitro Chromosome Aberration Chinese Hamster Ovary (CHO) cells Positive

Carcinogenicity Carcinogenicity of the mixture has not been determined. Consumption of alcoholic

beverages is considered carcinogenic to humans (Group 1) by IARC, though ethanol itself has not been classified by this agency. No other components are listed as carcinogens by

IARC, US OSHA or NTP.

Ethyl alcohol (ethanol)

IARC Group 1 (Carcinogenic to Humans)

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NTP Known Human Carcinogen

Section 12: ECOLOGICAL INFORMATION

Environmental Overview: Environmental properties have not been thoroughly investigated. Releases to the

environment should be avoided.

12.1. Toxicity

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

Ethyl alcohol (ethanol)

Oncorhynchus mykiss (Rainbow Trout) LC50/96h 12,900-15,300 mg/L

Docetaxel anhydrous

Daphnia magna (Water Flea) LC50 48 hours > 3.3 mg/l

Aquatic Toxicity Comments: A greater than (>) symbol indicates that acute ecotoxicity was not observed at the

maximum solubility. Since the substance is insoluble in aqueous solutions above this

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concentration, an acute ecotoxicity value (i.e. LC/EC50) is not achievable.

12.2. Persistence and degradability

Persistence and degradability

Biodegradation: (Method, Inoculum, Biodeg Study, Result, Endpoint, Duration, Classification)

Ethyl alcohol (ethanol)

Not Ready

12.3. Bioaccumulative potential

<u>Bioaccumulation</u> No information available.

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.

Chemical Name	PBT and vPvB assessment	
Polyethylene glycol	The substance is not PBT / vPvB	
Ethyl alcohol (ethanol)	The substance is not PBT / vPvB PBT assessment does	
	not apply	
Citric acid	The substance is not PBT / vPvB	

12.6. Other adverse effects

Other adverse effects No information available.

Section 13: DISPOSAL CONSIDERATIONS

13.1. 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

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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.

Section 14: TRANSPORT INFORMATION

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

This material is regulated for transportation as a hazardous material/dangerous good.

UN number: UN 1170 UN proper shipping name: Ethanol solution

TDG 3
Packing group:

Section 15: REGULATORY INFORMATION

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

Polyethylene glycol

CERCLA/SARA Section 313 de minimus %
California Proposition 65
Not Listed
Present
EINECS
AICS
Standard for Uniform Scheduling of Medicines and
Poisons (SUSMP)
Not Listed
Present
Schedule 3
Schedule 2

Polysorbate 80

CERCLA/SARA Section 313 de minimus % Not Listed
California Proposition 65 Not Listed
TSCA Present
EINECS Not Listed
AICS Present

Ethyl alcohol (ethanol)

CERCLA/SARA Section 313 de minimus % Not Listed

California Proposition 65 carcinogen 4/29/2011 in alcoholic beverages carcinogen

7/1/1988 when associated with alcohol abuse

developmental toxicity 10/1/1987 in alcoholic beverages

TSCA Present EINECS 200-578-6 AICS Present

Docetaxel anhydrous

CERCLA/SARA Section 313 de minimus % Not Listed
California Proposition 65 Not Listed
EINECS Not Listed
Standard for Uniform Scheduling of Medicines and Schedule 4

Poisons (SUSMP)

Citric acid

CERCLA/SARA Section 313 de minimus % Not Listed California Proposition 65 Not Listed TSCA Present EINECS 201-069-1 AICS

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15.2. Chemical safety assessment

Chemical Safety Report No information available

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H225 - Highly flammable liquid and vapor, H319 - Causes serious eye irritation, H341 - Suspected of causing genetic defects, H360D - May damage the unborn child, H362 - May cause harm to breast-fed children

Data Sources: Publicly available toxicity information. Safety data sheets for individual ingredients.

Reason for revision Updated Section 1 - Identification of the Substance/Preparation and the

Company/Undertaking. Updated Section 2 - Hazard Identification.

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Prepared By Product Stewardship Hazard Communication

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.