

Revision date: 05-Dec-2016

Version: 1.0

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1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING Product Identifier

Material Name: Vinorelbine Tartrate Injection (Hospira, Inc.)

Trade Name: Chemical Family: Not established Semi-Synthetic Vinca Alkaloid

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Pharmaceutical product used as Antineoplastic

Details of the Supplier of the Safety Data Sheet Hospira, A Pfizer Company 275 North Field Drive Lake Forest, Illinois 60045 1-800-879-3477

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: pfizer-MSDS@pfizer.com

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS - Classification

Germ Cell Mutagenicity: Category 1B Reproductive Toxicity: Category 1B

Label Elements

Signal Word: Hazard Statements:	Danger H340 - May cause genetic defects H360D - May damage the unborn child
Precautionary Statements:	 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 attention/advice P405 - Store locked up P501 - Dispose of contents/container in accordance with all local and national regulations

Hospira UK Limited Horizon Honey Lane Hurley Maidenhead, SL6 6RJ United Kingdom Emergency telephone number: International CHEMTREC (24 hours): +1-703-527-3887

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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 requires the inclusion of all known hazards of the product or its ingredients regardless of the potential risk. The precautionary statements and warning included may not apply in all cases. Your needs may vary depending upon the potential for exposure in your workplace.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous

i la				
Ingredient	CAS Number	EU EINECS/ELINCS	GHS Classification	%
		List		
Vinorelbine Tartrate	125317-39-7	Not Listed	Muta. 1B (H340)	1
			Repr. 1B (H360D)	

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Water for Injection	7732-18-5	231-791-2	Not Listed	*

Additional Information:

* Proprietary

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 mixture has been withheld as a trade secret.

For the full text of the CLP/GHS abbreviations mentioned in this Section, see Section 16

4. FIRST AID MEASURES

Description of 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.
Most Important Symptoms and Effects, Both Acute and Delayed Symptoms and Effects of For information on potential signs and symptoms of exposure, See Section 2 - Hazards Exposure: Identification and/or Section 11 - Toxicological Information. Medical Conditions None known Aggravated by Exposure: Verticities	

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Indication of the Immediate Medical Attention and Special Treatment Needed None

Notes to Physician:

5. FIRE FIGHTING MEASURES

Extinguishing Media: Extinguish fires with CO2, extinguishing powder, foam, or water.

Special Hazards Arising from the Substance or Mixture

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

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

Advice for Fire-Fighters

During all fire fighting activities, wear appropriate protective equipment, including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Personnel involved in clean-up should wear appropriate personal protective equipment (see Section 8). Minimize exposure.

Environmental Precautions

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

Methods and Material for Containment and Cleaning Up

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.
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

Precautions for Safe Handling

Restrict access to work area. 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. 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.

Conditions for Safe Storage, Including any Incompatibilities

Store as directed by product packaging. Storage Conditions: Specific end use(s): Pharmaceutical drug product

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Vinorelbine Tartrate

Pfizer Occupational Exposure OEB 5 (control exposure to <1ug/m³) Band (OEB):

Exposure Controls

Engineering Controls:

General room ventilation is adequate unless the process generates dust, mist or fumes. Engineering controls should be used as the primary means to control exposures. Keep airborne contamination levels below the exposure limits listed above in this section.

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8. EXPOSURE CONTROLS /	PERSONAL PROTECTION
Personal Protective Equipment:	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.
Hands:	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.)
Eyes:	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.)
Skin:	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.)
Respiratory protection:	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.)

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Solution No data available. Mixture	Color: Odor Threshold: Molecular Weight:	Colorless to Pale yellow No data available. Mixture
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, E Water for Injection No data available Vinorelbine Tartrate No data available Decomposition Temperature (°C):	No data available No data available No data available. No data available No data available. Endpoint, Value)		
Evaporation Rate (Gram/s): Vapor Pressure (kPa): Vapor Density (g/ml): Relative Density: Viscosity:	No data available No data available No data available No data available No data available		
Flammablity: Autoignition Temperature (Solid) (°C): Flammability (Solids): Flash Point (Liquid) (°C): Upper Explosive Limits (Liquid) (% by Vol.): Lower Explosive Limits (Liquid) (% by Vol.):		No data available No data available No data available No data available No data available	

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: No data available Stable under normal conditions of use.

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10. STABILITY AND REACTIVITY

Possibility of Hazardous Reactions	
Oxidizing Properties:	No data available
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
Hazardous Decomposition	No data available
Products:	

11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects	
General Information:	The information included in this section describes the potential hazards of the individual
	ingredients.
Long Term:	Animal studies have shown a potential to cause adverse effects on the fetus.
Known Clinical Effects:	Bone marrow suppression is the most serious adverse effect seen during clinical use. Adverse effects most commonly reported in clinical use include decreased red blood cell count
	(anemia), neutropenia, thrombocytopenia, inflammation of the mouth (stomatitis), nausea, liver enzyme changes, fatigue, allergic reaction.

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

Vinorelbine Tartrate Mouse Intravenous LD50 28 mg/kg

Reproduction & Developmental Toxicity: (Study Type, Species, Route, Dose, End Point, Effect(s))

Vinorelbine Tartrate

Embryo / Fetal DevelopmentMouseIntravenous9 mg/m2LOAELEmbryotoxicity, Fetotoxicity, TeratogenicEmbryo / Fetal DevelopmentRabbitIntravenous 5.5 mg/m2LOAELEmbryotoxicity, Fetotoxicity, TeratogenicReproductive & FertilityRatIntravenous 0.22 mg/kg/dayLOAELFertility

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

Vinorelbine Tartrate			
In Vivo Micronucleus M	ouse Positi	ve	
HGPRT Forward Gene Mu	itation Assay	Positive	
In Vivo Chromosome Aber	ration Ham	ster Bone marro	w Positive
Bacterial Mutagenicity (Am	ies) Salmor	nella Negativ	е

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

 See below
 See below

12. ECOLOGICAL INFORMATION Environmental Overview: Environmental properties have not been thoroughly investigated. Releases to the environment should be avoided. Toxicity: No data available Persistence and Degradability: No data available Bio-accumulative Potential: No data available

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Mobility in Soil:

No data available

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

Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

Water for Injection	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
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
Vinorelbine Tartrate	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
EU EINECS/ELINCS List	Not Listed

16. OTHER INFORMATION

Text of CLP/GHS Classification abbreviations mentioned in Section 3

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Germ cell mutagenicity-Cat.1B; H340 - May cause genetic defects Reproductive toxicity-Cat.1B; H360D - May damage the unborn child

Data Sources:	Publicly available toxicity information. Pfizer proprietary drug development information.
Reasons for Revision:	New data sheet.
Revision date:	05-Dec-2016 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