



YONDELIS

MATERIAL SAFETY DATA SHEET

Edition : 12 Date : 27/05/2019

Sheet 1 of 4

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

YONDELIS

Relevant identified uses of The Substance or Mixture :
Finished Pharmaceutical Product.

Company Information

Pharma Mar S.A.
Avda. de los Reyes, 1
28770 Colmenar Viejo - Madrid - ESPAÑA
Phone (34) 91-846-6000

Emergency :

Instituto Nacional de Toxicologia (24h) Phone : (34) 915-620-420
Pharma Mar [09:00 - 17:00] Phone (34) 91-846 60 00

2. HAZARDS IDENTIFICATION

Hazard Category : ---

Signal Word ---

For Trabectedin Drug Substance: Harmful by inhalation, in contact with skin and if swallowed. Possible risks of irreversible effects

Cytotoxic anticancer medicinal product.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Molecular Formula:CAS Number : -----

Ingredient	CAS	%	Classification
TRABECTEDIN	114899-77-3	0.23 %	Acute Toxicity : 1
Sucrose	57-50-1	93.4 %	Not classified as hazardous
Potassium phosphate monobasic	7778-77-0	6.3 %	Not classified as hazardous

Active Ingredient Drug Substance: Trabectedin --- (1'R, 6R, 6aR, 7R, 13S, 14S, 16R, 20R)-5-(acetyloxy)-3', 4', 6, 6a, 7, 13, 14, 16-octahydro-6', 8, 14-trihydroxy-7', 9-dimethoxy-4, 10, 23-trimethyl-spiro[6, 16-(epithiopropanoxymethano)-7, 13-imino-12H-1, 3-dioxolo[7, 8]isoquino[3, 2-b][3]benzazocine-20, 1'(2'H)-isoquinolin]-19-one (Molecular Formula : C39 H43 N3 O11 S)

4. FIRST AID MEASURES

Inhalation : *Remove to exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult give oxygen*

Ingestion : *Wash mouth out with water. Only induce vomiting at instructions of a physician.*

Eye : *Flush eyes with plenty of water for at least 15 minutes.*

Skin : *Wash affected areas with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.*

5. FIRE FIGHTING MEASURES

Extinguishing media :	<i>Use Water, Dry Chemical, Carbon Dioxide or chemical Foam</i>
Unusual Hazard Special Risk:	<i>May include carbon monoxide, carbon dioxide, oxides of nitrogen and oxides of sulfur.</i>
Protective equipment:	<i>Wear self-contained breathing apparatus and protective clothing</i>





6. ACCIDENTAL RELEASE MEASURES

Personal Precautions :	<i>Wear protective equipment to avoid inhalation and skin/eye contact. Keep unprotected persons away.</i>
Environmental precautions :	<i>Take precautions to ensure product does not contaminate the ground or enter the drainage system</i>
Methods for spill and cleaning:	<i>Wipe up with absorbent towels/other absorbent material and place all material into a suitable container for disposal. Decontaminate.</i>

7. HANDLING AND STORAGE

Handling Precautions :	<i>Chemicals should be used only by those trained in handling potentially hazardous materials</i>
	<i>See relevant guidance for handling cytotoxic materials. Wear protective equipment to avoid inhalation and skin/eye contact.</i>
Storage :	<i>Store in tightly sealed containers. Protect from moisture. Drug is routinely stored between + 2°C °C and + 8°C</i>

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering measures :	<i>Use laminar flow biological cabinet or adequate ventilation to keep airborne concentrations low.</i>
Hygiene practices:	<i>Remove/laundry contaminated clothing before re-use or dispose after single use. Wash thoroughly after handling.</i>
 Respiratory protection:	<i>Wear respirator fitted with particulate filter P2</i>
 Hands protection:	<i>Use appropriate gloves.</i>
 Eyes protection:	<i>Wear appropriate protective eyeglasses or chemical safety goggles.</i>
 Clothing:	<i>Wear appropriate protective clothing to prevent skin exposure.</i>

9. PHYSICAL AND CHEMICAL PROPERTIES

<u>Form:</u> Powder	<u>Molecular Mass</u> 761,84 For Trabectedin	<u>Temperatures:</u> Boiling point :	Not determined
<u>Odour:</u> Not determined	<u>pH value:</u> 3,8 - 4,4 Reconstituted Solution	Melting point :	151 °C
<u>Colour:</u> White to pale yellow	<u>Vapour pressure:</u> Not determined	Flash point :	Not determined
		Auto ignition point :	Not determined
Solubility in water :	Low		
Solubility :	very soluble in acetone, methanol, ethanol, chloroform, dichloromethane, ethyl acetate and acetonitrile		

10. STABILITY AND REACTIVITY

Conditions to be avoided :	Keep at a Temperature not exceeding + 8°C
Substances to be avoided :	Not available.
Hazardous decomposition :	Burning may produce Carbon monoxide, carbon dioxide, oxides of nitrogen & oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

LD50 Oral rats:

Trabectedin DS <5 mg/kg MTD rat: 75 µg/Kg (Single Bolus dose reached in male rats). Acute intravenous toxicity studies in mice, rats and dogs have shown hematologic toxicity, hepatotoxicity and local tolerance effects.

Mutagenicity : Clearly positive in mouse micro-nucleus test and Chinese Hamster Ovary cells test.

Sensitization : No specific evaluations performed, but no signs of hypersensitivity seen in patients.

Test in Rabbits: Local Irritation

12. ECOLOGICAL INFORMATION.

Environmental effects :

Not determined

13. DISPOSAL CONSIDERATIONS.

Official Regulations : Disposal should be via an approved contractor and should take account of all local regulations.

Waste Disposal Methods :



YONDELIS

MATERIAL SAFETY DATA SHEET

Edition : 12 Date : 27/05/2019

Sheet 4 of 4

14. TRANSPORT INFORMATION

UN Number : Information : Transport symbol

--- Not regulated as a dangerous good

ADR / RID**IATA****IMDG**

Class: --- Class: --- Instruc --- Class: ---

Danger: --- PG (Oral) : --- PG: ---

PG: --- Inhalation PG I : No MFAG: ---

This material is NOT classed as having an 'Inhalation Hazard' as defined by IATA and ICAO Regulations.

15. REGULATORY INFORMATION

Labelling according to EC Directives :

Signal Word : --- SYMBOLS

Hazard Category : ---

Hazard and precautionary statements ---

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

According to Article 1, item 5 (a) of CLP Regulation (EC) 1272/2008.

Medicinal products in the finished state for human use as defined in 2001/83/EC, are excepted from classification and other criteria of 1272/2008.

15.2 Chemical safety assessment

A Chemical Safety Assessment is not applicable (mixture)

16. OTHER INFORMATION.

Revision : **12** [12] Change TRANSPORT INFORMATION ADR Regulations. Investigator Brochure. Yondelis Edition 12 december 2017.

EC Directive Current. The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.

Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road - CAS: Chemical Abstracts Service (division of the American Chemical Society) - ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods - IATA: International Air Transport Association - GHS: Globally Harmonised System of Classification and Labelling of Chemicals - RID: Regulations Concerning the International Transport of Dangerous Goods by Rail