

Revision date: 04-Mar-2015

Version: 3.0

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# 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING Product Identifier Material Name: Spironolactone Tablets

Trade Name:ALDACTONE; ALDACTONE-A; PRACTON; SPIRONOLACTONE-PFIZERChemical Family:Mixture

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against Intended Use: Pharmaceutical product for the treatment of high blood pressure (hypertension).

Details of the Supplier of the Safety Data Sheet Pfizer Inc Pfizer Pharmaceuticals Group 235 East 42nd Street New York, New York 10017 1-800-879-3477

Emergency telephone number: CHEMTREC (24 hours): 1-800-424-9300 Contact E-Mail: pfizer-MSDS@pfizer.com Pfizer Ltd Ramsgate Road Sandwich, Kent CT13 9NJ United Kingdom +00 44 (0)1304 616161 Emergency telephone number: International CHEMTREC (24 hours): +1-703-527-3887

# 2. HAZARDS IDENTIFICATION

#### Classification of the Substance or Mixture GHS - Classification

Reproductive Toxicity: Category 1B Carcinogenicity: Category 2 Specific target organ systemic toxicity (repeated exposure): Category 2

#### **EU Classification:**

EU Indication of danger: Toxic to Reproduction: Category 2 Carcinogenic: Category 3 Harmful

EU Risk Phrases:

R40 - Limited evidence of a carcinogenic effect R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed. R61 - May cause harm to the unborn child.

#### Label Elements

Signal Word:	Danger
Hazard Statements:	H351 - Suspected of causing cancer
	H373 - May cause damage to organs through prolonged or repeated exposure H360D - May
	damage the unborn child

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Precautionary Statements: P201 - Obtain special instructions before use

- P202 Do not handle until all safety precautions have been read and understood
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P281 Use personal protective equipment as required
- P308 + P313 IF exposed or concerned: Get medical attention/advice
- P314 Get medical attention/advice if you feel unwell
- P405 Store locked up

No data available

P501 - Dispose of contents/container in accordance with all local and national regulations



Other Hazards Australian Hazard Classification (NOHSC):

Note:

Hazardous Substance. Non-Dangerous Goods.

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

Ingredient	CAS Number	EINECS/ELINCS		GHS Classification	%	
		List				
Maize starch	9005-25-8	232-679-6	Not Listed	Not Listed	*	
Magnesium stearate	557-04-0	209-150-3	Not Listed	Not Listed	*	
Calcium sulfate, dihydrate	10101-41-4	Not Listed	Not Listed	Not Listed	*	
Spironolactone	52-01-7	200-133-6	Repr.Cat.2;R61	Carc.2 (H351)	10-20%	
			Carc.Cat3;R40	STOT RE.2 (H373)		
			Xn;R48/22	Repr.1B (H360D)		
Polyethylene glycol	25322-68-3	Not Listed	Not Listed	Not Listed	*	

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Povidone	9003-39-8	Not Listed	Not Listed	Not Listed	*
Peppermint flavor	8006-90-4	Not Listed	Not Listed	Not Listed	*
Hydroxypropyl methylcellulose	9004-65-3	Not Listed	Not Listed	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 R phrases and CLP/GHS abbreviations mentioned in this Section, see Section 16

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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 no 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.
Nost Important Symptoms and Efference Symptoms and Effects of Exposure: Medical Conditions Aggravated by Exposure: Indication of the Immediate Medical Notes to Physician:	<ul> <li>cts, Both Acute and Delayed         For information on potential signs and symptoms of exposure, See Section 2 - Hazards             Identification and/or Section 11 - Toxicological Information.             None known     </li> <li>Attention and Special Treatment Needed             None</li> </ul>
Notes to Physician.	None
. FIRE FIGHTING MEASURE	5
xtinguishing Media:	Extinguish fires with CO2, extinguishing powder, foam, or water.
xtinguishing Media: pecial Hazards Arising from the Su Hazardous Combustion	Extinguish fires with CO2, extinguishing powder, foam, or water.
xtinguishing Media: pecial Hazards Arising from the Su Hazardous Combustion Products: Fire / Explosion Hazards: dvice for Fire-Fighters	Extinguish fires with CO2, extinguishing powder, foam, or water. <b>Ibstance or Mixture</b> Emits oxides of sulfur under combustion.
Products: Fire / Explosion Hazards: Advice for Fire-Fighters	Extinguish fires with CO2, extinguishing powder, foam, or water. <b>Ibstance or Mixture</b> Emits oxides of sulfur under combustion. Not applicable wear appropriate protective equipment, including self-contained breathing apparatus.
Extinguishing Media: Extinguishing Media: Extinguishing Arising from the Su Hazardous Combustion Products: Fire / Explosion Hazards: Extinct for Fire-Fighters During all fire fighting activities, Control Control Co	Extinguish fires with CO2, extinguishing powder, foam, or water. <b>Ibstance or Mixture</b> Emits oxides of sulfur under combustion. Not applicable wear appropriate protective equipment, including self-contained breathing apparatus.
Extinguishing Media: Extinguishing Media: Extinguishing Media: Expecial Hazards Arising from the Su Hazardous Combustion Products: Fire / Explosion Hazards: Exting all fire fighting activities, During all fire fighting activities, Extinguishing all fire fighting activities, During all fire fighting activities, Extinguishing	Extinguish fires with CO2, extinguishing powder, foam, or water. <b>Ibstance or Mixture</b> Emits oxides of sulfur under combustion. Not applicable wear appropriate protective equipment, including self-contained breathing apparatus. EASURES Juipment and Emergency Procedures
Extinguishing Media: Extinguishing Media: Extinguishing Media: Expecial Hazards Arising from the Su Hazardous Combustion Products: Fire / Explosion Hazards: Exting all fire fighting activities, During all fire fighting activities, Extinguishing all fire fighting activities, During all fire fighting activities, Extinguishing	Extinguish fires with CO2, extinguishing powder, foam, or water. <b>Ibstance or Mixture</b> Emits oxides of sulfur under combustion. Not applicable wear appropriate protective equipment, including self-contained breathing apparatus. <b>EASURES</b> <b>Juipment and Emergency Procedures</b> should wear appropriate personal protective equipment (see Section 8). Minimize exposure. labeled, sealed container for disposal. Care should be taken to avoid environmental release.

# 7. HANDLING AND STORAGE

# **Precautions for Safe Handling**

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### 7. HANDLING AND STORAGE

Minimize dust generation and accumulation. If tablets or capsules are crushed and/or broken, avoid breathing dust and 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

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

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### **Control Parameters**

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

Maize starch

ACGIH Threshold Limit Value (TWA)	10 mg/m <sup>3</sup>
Australia TWA	10 mg/m <sup>3</sup>
Belgium OEL - TWA	10 mg/m <sup>3</sup>
Bulgaria OEL - TWA	10.0 mg/m <sup>3</sup>
Czech Republic OEL - TWA	$4.0 \text{ mg/m}^3$
Greece OEL - TWA	10 mg/m <sup>3</sup>
	5 mg/m <sup>3</sup>
Ireland OEL - TWAs	10 mg/m <sup>3</sup>
	4 mg/m <sup>3</sup>
OSHA - Final PELS - TWAs:	15 mg/m <sup>3</sup>
Portugal OEL - TWA	10 mg/m <sup>3</sup>
Slovakia OEL - TWA	4 mg/m <sup>3</sup>
Spain OEL - TWA	10 mg/m <sup>3</sup>
Switzerland OEL -TWAs	3 mg/m <sup>3</sup>
Magnesium stearate	
ACGIH Threshold Limit Value (TWA)	10 mg/m <sup>3</sup>
Lithuania OEL - TWA	5 mg/m <sup>3</sup>
Sweden OEL - TWAs	5 mg/m <sup>3</sup>
Coloium cultate dibudrate	
Calcium sulfate, dihydrate	10 mg/m <sup>3</sup>
ACGIH Threshold Limit Value (TWA)	1.5 mg/m <sup>3</sup>
Germany (DFG) - MAK	4 mg/m <sup>3</sup>
Portugal OEL - TWA	10 mg/m <sup>3</sup>
Spain OEL - TWA	10 mg/m <sup>3</sup>
Switzerland OEL -TWAs	3 mg/m <sup>3</sup>
Vietnam OEL - TWAS	6 mg/m <sup>3</sup>
	0 mg/m
Spironolactone	
Pfizer OEL TWA-8 Hr:	90 μg/m³, Skin
Polyethylene glycol	
Austria OEL - MAKs	1000 mg/m <sup>3</sup>
Germany - TRGS 900 - TWAs	1000 mg/m <sup>3</sup>
Germany (DFG) - MAK	1000 mg/m <sup>3</sup> average molecular weight 200-600
Slovakia OEL - TWA	1000 mg/m <sup>3</sup>

8. EXPOSURE CONTROLS /	8. EXPOSURE CONTROLS / PERSONAL PROTECTION					
Slovenia OEL - TWA	1000 mg/m <sup>3</sup>					
Switzerland OEL -TWAs	1000 ppm					
Exposure Controls						
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.					
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.					
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.					

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Odor: Molecular Formula:	Tablet No data available. Mixture	Color: Odor Threshold: Molecular Weight:	Yellow; Orange; Peach No data available. Mixture
Solvent Solubility: Water Solubility: pH: Melting/Freezing Point (°C): Boiling Point (°C): Partition Coefficient: (Method, pH, E Spironolactone	No data available No data available No data available. No data available No data available. <b>ndpoint, Value)</b>		
Predicted 7.4 Log D 3.12 <b>Povidone</b> No data available <b>Maize starch</b> No data available			
Magnesium stearate No data available Peppermint flavor No data available Hydroxypropyl methylcellulose			
No data available Calcium sulfate, dihydrate No data available Polyethylene glycol No data available			
Decomposition Temperature (°C): 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 No data available		

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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.
Possibility of Hazardous Reactions	
Oxidizing Properties:	No data available
Conditions to Avoid:	None known
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.
Short Term:	May be absorbed through the skin and cause systemic effects. Antihypertensive drug: has blood pressure-lowering properties
Known Clinical Effects:	Adverse effects seen in clinical use include gastrointestinal discomfort, dizziness, and headache. Hypersensitivity reactions may also occur in susceptible individuals. Effects on blood and blood-forming organs have also occurred.

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

#### Spironolactone

RatOralLD 504121mg/kgMouseOralLD 50>1000mg/kgRabbitOralLD 50>1000mg/kgRatIntraperitonealLD 50786mg/kg

#### Povidone

Rat Oral LD50 100 g/kg

#### Magnesium stearate

#### Hydroxypropyl methylcellulose

Rat Oral LD50 > 10,000 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)

**Spironolactone** Skin Sensitization - GPMT Guinea Pig No effect

# **11. TOXICOLOGICAL INFORMATION**

#### **Polyethylene glycol**

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

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

#### Spironolactone

13 Week(s)	Rat	Oral	50 mg/kg	LOAE	EL BI	bod
78 Week(s)	Rat	Oral	50 mg/kg/	day	LOAEL	Liver, Male reproductive system

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

#### Spironolactone

Reproductive & Fertility Rat Oral 15 mg/kg/day NOAEL Fetotoxicity Fertility Reproductive & Fertility Rat Intraperitoneal 100 mg/kg/day LOAEL Embryo / Fetal Development Mouse Intraperitoneal 100 mg/kg/day LOAEL Maternal Toxicity Embryo / Fetal Development 50 mg/kg/day LOAEL Fetotoxicity Rat Oral Embryo / Fetal Development Rabbit Oral 20 mg/kg/day LOAEL Fetotoxicity

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

#### Spironolactone

Bacterial Mutagenicity (Ames)	Salmonella , E. coli	Negative
Mammalian Cell Mutagenicity	Negative without activa	ation

#### Carcinogenicity: (Duration, Species, Route, Dose, End Point, Effect(s))

#### Spironolactone

104 Week(s)	Rat	Oral	10 m	g/kg/day	LC	DAEL	Beni	gn tumors	
52 Week(s)	Non-h	uman Pr	imate	Oral	20	mg/kg	/day	LOAEL	Reproductive System

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

Spironolactone IARC:	Group 3 (Not Classifiable)
Povidone IARC:	Group 3 (Not Classifiable)

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

Partition Coefficient: (Method, pH, Endpoint, Value)SpironolactonePredicted7.4Log D3.12

Mobility in Soil:

No data available

# **13. DISPOSAL CONSIDERATIONS**

 Waste Treatment Methods:
 Dispose of waste in accordance with specific and Community specific pro known environmental and human he

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.

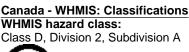
## **14. TRANSPORT INFORMATION**

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





Maize starch CERCLA/SARA 313 Emission reporting California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Australia (AICS): REACH - Annex IV - Exemptions from the obligations of Register: EU EINECS/ELINCS List

Not Listed Not Listed Present Present Present

232-679-6

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# **15. REGULATORY INFORMATION**

Povidone	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	Not Listed
	Not Listed
Peppermint flavor	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	Not Listed
Magnesium stearate	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
EU EINECS/ELINCS List	209-150-3
Hydroxypropyl methylcellulose	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
Standard for the Uniform Scheduling	Schedule 4
for Drugs and Poisons:	<b>N 1 1 1 1</b>
EU EINECS/ELINCS List	Not Listed
Calcium sulfate, dihydrate	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Australia (AICS):	Present
EU EINECS/ELINCS List	Not Listed
Spironolactone	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	carcinogen initial date 5/1/97
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present
Standard for the Uniform Scheduling	Schedule 4
for Drugs and Poisons:	
EU EINECS/ELINCS List	200-133-6
Polyethylene glycol	
CERCLA/SARA 313 Emission reporting	Not Listed
California Proposition 65	Not Listed
Inventory - United States TSCA - Sect. 8(b)	Present
Australia (AICS):	Present

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# 15. REGULATORY INFORMATION Standard for the Uniform Scheduling Schedule 3 for Drugs and Poisons: EU EINECS/ELINCS List Not Listed

# Text of R phrases and GHS Classification abbreviations mentioned in Section 3

Carcinogenicity-Cat.2; H351 - Suspected of causing cancer Specific target organ toxicity, repeated exposure-Cat.2; H373 - May cause damage to organs through prolonged or repeated exposure Reproductive toxicity-Cat.1B; H360D - May damage the unborn child

Carcinogenic: Category 3 Xn - Harmful Toxic to Reproduction: Category 2

R40 - Limited evidence of a carcinogenic effect R61 - May cause harm to the unborn child. R48/22 - Harmful: danger of serious damage to health by prolonged exposure if swallowed.

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

 Reasons for Revision:
 Updated Section 2 - Hazard Identification. Updated Section 3 - Composition / Information on Ingredients. Updated Section 16 - Other Information.

 Revision date:
 04-Mar-2015 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