

Version: 1.4 Page 1 of 11 Revision date: 22-Aug-2013

# IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Pfizer Inc **Pfizer Pharmaceuticals Group** 235 East 42nd Street New York, New York 10017 1-212-573-2222

**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

**Material Name: Eplerenone Tablets** 

**Trade Name:** INSPRA; SELARA

**Chemical Family:** Mixture

Intended Use: Pharmaceutical product used as cardiovascular drug

### 2. HAZARDS IDENTIFICATION

Appearance: White tablets

Statement of Hazard: Non-hazardous in accordance with international standards for workplace safety.

**Additional Hazard Information:** 

**Short Term:** 

May cause eye and skin irritation if tablets are crushed or broken (based on components).

Accidental ingestion may cause effects similar to those seen in clinical use.

**Known Clinical Effects:** 

Effects reported during clinical use include headache, dizziness, decrease in blood pressure

(hypotension), increased potassium, nausea, diarrhea, and insomnia.

**EU** Indication of danger: Not classified

**Australian Hazard Classification** 

(NOHSC):

Non-Hazardous Substance. Non-Dangerous Goods.

Note:

This document has been prepared in accordance with standards for workplace safety, which require the inclusion of all known hazards of the active substance or its intermediates 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.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous

i iuzui uous				
Ingredient	CAS Number	<b>EU EINECS/ELINCS List</b>	<b>EU Classification</b>	%
Eplerenone	107724-20-9	Not Listed	Not Listed	25 or 50 mg***
Ferric oxide red	1309-37-1	215-168-2	Not Listed	*
Microcrystalline cellulose	9004-34-6	232-674-9	Not Listed	*
Talc (non-asbestiform)	14807-96-6	238-877-9	Not Listed	*

Material Name: Eplerenone Tablets
Page 2 of 11
Revision date: 22-Aug-2013
Version: 1.4

**COMPOSITION/INFORMATION ON INGREDIENTS** Magnesium stearate 557-04-0 209-150-3 Not Listed Polyethylene glycol 25322-68-3 Not Listed Not Listed Sodium lauryl sulfate 151-21-3 205-788-1 Not Listed Titanium dioxide 13463-67-7 236-675-5 Not Listed

Ingredient	CAS Number	<b>EU EINECS/ELINCS List</b>	<b>EU Classification</b>	%
Ferric oxide yellow	51274-00-1	257-098-5	Not Listed	*
Croscarmellose sodium	74811-65-7	Not Listed	Not Listed	*
Lactose	63-42-3	200-559-2	Not Listed	*
Polysorbate 80	9005-65-6	Not Listed	Not Listed	*
Hydroxypropyl methylcellulose	9004-65-3	Not Listed	Not Listed	*

Additional Information: \* Proprietary

\*\*\* per tablet/capsule/lozenge/suppository

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

safety.

## 4. FIRST AID MEASURES

Eye Contact: Flush eye(s) immediately with plenty of water. If irritation occurs or persists, get medical

attention.

**Skin Contact:** Remove contaminated clothing and wash exposed area with soap and water. Obtain medical

assistance if irritation occurs.

**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.

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 spilled material by a method that

controls dust generation. A damp cloth or a filtered vacuum should be used to clean spills of

dry solids. Clean spill area thoroughly.

Material Name: Eplerenone Tablets
Page 3 of 11
Revision date: 22-Aug-2013
Version: 1.4

\_\_\_\_\_

**Measures for Environmental** 

**Protections:** 

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

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 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.

**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.

**Eplerenone** 

Pfizer OEL TWA-8 Hr: 350 µg/m<sup>3</sup>

Ferric oxide red

ACGIH Threshold Limit Value (TWA) 5 mg/m³
Australia TWA 5 mg/m³
10 mg/m³

Austria OEL - MAKs 5 mg/m³ 10 mg/m³

10 mg/m<sup>3</sup> **Belgium OEL - TWA**2 ppm
5 mg/m<sup>3</sup>

 Bulgaria OEL - TWA
 5.0 mg/m³

 Denmark OEL - TWA
 3.5 mg/m³

 Estonia OEL - TWA
 5 mg/m³

 Finland OEL - TWA
 5 mg/m³

 France OEL - TWA
 5 mg/m³

 Greece OEL - TWA
 10 mg/m³

Hungary OEL - TWA 6 mg/m³ Ireland OEL - TWAs 5 mg/m³

10 mg/m<sup>3</sup> 4 mg/m<sup>3</sup>

Lithuania OEL - TWA 3.5 mg/m³
OSHA - Final PELS - TWAs: 10 mg/m³

| 15 mg/m³ | 5 m

Microcrystalline cellulose

Material Name: Eplerenone Tablets

Revision date: 22-Aug-2013

Page 4 of 11

Version: 1.4

3

8. EXPOSURE CONTROLS / PERSONAL PROTECTION	

10 mg/m <sup>3</sup>
10 mg/m <sup>3</sup>
4 mg/m <sup>3</sup>
2 mg/m <sup>3</sup>
15 mg/m <sup>3</sup>
10 mg/m <sup>3</sup>

Spain OEL - TWA 10 mg/m<sup>3</sup>

Talc (non-asbestiform)

ACGIH Threshold Limit Value (TWA)

Australia TWA

2.5 mg/m³

2.5 mg/m³

Austria OEL - MAKs

2 mg/m³

2 mg/m³

Belgium OEL - TWA

2 mg/m³

1.0 fiber/cm3
6.0 mg/m³
3.0 mg/m³

 $\begin{array}{cccc} \textbf{Czech Republic OEL - TWA} & 2.0 \text{ mg/m}^3 \\ & 10 \text{ mg/m}^3 \\ \textbf{Denmark OEL - TWA} & 0.3 \text{ fiber/cm3} \\ \textbf{Finland OEL - TWA} & 0.5 \text{ fiber/cm3} \\ \textbf{Greece OEL - TWA} & 10 \text{ mg/m}^3 \\ & 2 \text{ mg/m}^3 \\ \end{array}$ 

 Hungary OEL - TWA
 2 mg/m³

 Ireland OEL - TWAs
 10 mg/m³

 0.8 mg/m³

**Lithuania OEL - TWA**2 mg/m<sup>3</sup>
1 mg/m<sup>3</sup>

Netherlands OEL - TWA 0.25 mg/m³
OSHA - Final PELs - Table Z-3 Mineral D: 20 mppcf
Poland OEL - TWA 4.0 mg/m³
1.0 mg/m³

| 1.0 mg/m³ | 2 mg/m³ | 2 mg/m³ | Slovakia OEL - TWA | 2 mg/m³ | 10 mg/m³ | 10 mg/m³ | Slovenia OEL - TWA | 2 mg/m³ | 2 mg/m³ | 2 mg/m³ | Spain OEL - TWA | 2 mg/m³ | 2 mg/m³ | 3 mg/m³ | 1 mg/m³ |

Magnesium stearate

ACGIH Threshold Limit Value (TWA) 10 mg/m³
Lithuania OEL - TWA 5 mg/m³
Sweden OEL - TWAs 5 mg/m³

Polyethylene glycol

 Austria OEL - MAKs
 1000 mg/m³

 Germany - TRGS 900 - TWAs
 1000 mg/m³

**Germany (DFG) - MAK** 1000 mg/m³ average molecular weight 200-600

Slovakia OEL - TWA 1000 mg/m<sup>3</sup>

D700440

Material Name: Eplerenone Tablets Page 5 of 11 Revision date: 22-Aug-2013 Version: 1.4

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Slovenia OEL - TWA 1000 mg/m<sup>3</sup>

Sodium lauryl sulfate

Pfizer OEL TWA-8 Hr: 0.3 mg/m<sup>3</sup>

Titanium dioxide

10 mg/m<sup>3</sup> **ACGIH Threshold Limit Value (TWA) Australia TWA** 10 ma/m<sup>3</sup> **Austria OEL - MAKs** 5 mg/m<sup>3</sup> **Belgium OEL - TWA** 10 mg/m<sup>3</sup> **Bulgaria OEL - TWA** 10.0 mg/m<sup>3</sup> **Denmark OEL - TWA** 6 mg/m<sup>3</sup> **Estonia OEL - TWA** 5 mg/m<sup>3</sup> France OEL - TWA 10 mg/m<sup>3</sup> **Greece OEL - TWA** 10 mg/m<sup>3</sup>  $5 \text{ mg/m}^3$ 

Ireland OEL - TWAs 10 mg/m<sup>3</sup>

 $4 \text{ mg/m}^3$ 

Latvia OEL - TWA 10 mg/m<sup>3</sup> Lithuania OEL - TWA 5 mg/m<sup>3</sup> **OSHA - Final PELS - TWAs:** 15 mg/m<sup>3</sup> **Poland OEL - TWA** 10.0 mg/m<sup>3</sup> Portugal OEL - TWA 10 mg/m<sup>3</sup> Romania OEL - TWA 10 mg/m<sup>3</sup> Spain OEL - TWA 10 mg/m<sup>3</sup> Sweden OEL - TWAs 5 ma/m<sup>3</sup>

**Analytical Method:** Analytical method available for Eplerenone. Contact Pfizer Inc for further information. Engineering controls should be used as the primary means to control exposures. General **Engineering Controls:** 

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.

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

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.

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

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

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

**Tablets** Color: White **Physical State:** Molecular Formula: Mixture **Molecular Weight:** Mixture

Material Name: Eplerenone Tablets

Revision date: 22-Aug-2013

Page 6 of 11

Version: 1.4

## 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 included in this section describes the potential hazards of the individual

ingredients.

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

Lactose

Rat Oral LD50 > 10 g/kg

Talc (non-asbestiform)

Rat Oral LD50 > 1600 mg/kg

Titanium dioxide

Rat Oral LD50 > 7500 mg/kg Rat Subcutaneous LD50 50 mg/kg

Polysorbate 80

Rat Oral LD50 25 g/kg

Magnesium stearate

Rat Oral LD50 > 2000 mg/kg Rat Inhalation LC50 > 2000 mg/m<sup>3</sup>

Microcrystalline cellulose

Rat Oral LD50 > 5000 mg/kg Rabbit Dermal LD50 > 2000 mg/kg

Sodium lauryl sulfate

Rat Oral LD50 1288 mg/kg

**Eplerenone** 

Rat Oral Minimum Lethal Dose > 2000 mg/kg

Mouse Oral Minimum Symptomatic Dose > 300 mg/kg Dog Oral Minimum Symptomatic Dose 500 mg/kg

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)

Microcrystalline cellulose

Skin Irritation Rabbit Non-irritating Eye Irritation Rabbit Non-irritating

Material Name: Eplerenone Tablets Page 7 of 11 Version: 1.4 Revision date: 22-Aug-2013

## 11. TOXICOLOGICAL INFORMATION

#### Sodium lauryl sulfate

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild Moderate

Skin Sensitization - GPMT Guinea Pig Negative Skin Sensitization - LLNA Mouse Negative

#### **Eplerenone**

Eye Irritation Rabbit Minimal Skin Irritation Rabbit Mild

Skin Sensitization - GPMT Guinea Pig Negative

### Polyethylene glycol

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

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

### **Eplerenone**

13 Week(s) Oral 500 mg/kg/day LOAEL Rat Kidney

13 Week(s) Dog Oral 1.5 mg/kg/day NOEL Male reproductive system

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

#### **Eplerenone**

Reproductive & Fertility-Males Rat Oral 1000 mg/kg/day LOAEL Fertility

Oral Embryo / Fetal Development 1000 mg/kg/day Rat LOAEL Maternal Toxicity, Fetotoxicity Embryo / Fetal Development Rabbit Oral 300 mg/kg/day LOAEL Maternal Toxicity, Fetotoxicity Embryo / Fetal Development Rat Oral 300 mg/kg/day NOAEL No effects at maximum dose

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

#### Sodium lauryl sulfate

Bacterial Mutagenicity (Ames) Salmonella Negative

## **Eplerenone**

Bacterial Mutagenicity (Ames) Negative

Mammalian Cell Mutagenicity Mouse Lymphoma Negative

Chromosome Aberration Negative Unscheduled DNA Synthesis Negative In Vitro Micronucleus Negative

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

#### **Eplerenone**

6 Month(s) Not carcinogenic Mouse Oral 1000 mg/kg/day NOEL LOEL Benign tumors, Thyroid 2 Year(s) Male Rat Oral 75 mg/kg/day

Female Rat Oral 2 Year(s) 250 LOEL Benign tumors, Thyroid

**Carcinogen Status:** See below

Talc (non-asbestiform)

IARC: Group 3 (Not Classifiable)

Material Name: Eplerenone Tablets
Page 8 of 11
Revision date: 22-Aug-2013
Version: 1.4

10/0/0/11 data: 12 /tag 20/0

## 11. TOXICOLOGICAL INFORMATION

Titanium dioxide

IARC: Group 2B (Possibly Carcinogenic to Humans)

OSHA: Listed

Ferric oxide red

IARC: Group 3 (Not Classifiable)

## 12. ECOLOGICAL INFORMATION

Environmental Overview: Environmental properties have not been investigated. Releases to the environment should be

avoided. The following information is available for the individual ingredients.

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

Sodium lauryl sulfate

Oncorhynchus mykiss (Rainbow Trout) LC50 96 Hours 3.6 mg/L

**Eplerenone** 

Daphnia magna (Water Flea) TAD EC50 48 Hours > 380 mg/L

Pimephales promelas (Fathead Minnow) TAD LC50 96 Hours > 370 mg/L

Pseudokirchneriella subcapitata (Green Alga) OECD ErC50/0-72hr (OECD) Hours > 10 mg/L

Pseudokirchneriella subcapitata (Green Alga) TAD NOEC 12 Days > 10 mg/L

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

dose tested.

Bacterial Inhibition: (Inoculum, Method, End Point, Result)

**Eplerenone** 

Bacteria OECD EC50 3 Hours > 1000 mg/L

Chronic Aquatic Toxicity: (Species, Method, Duration, Endpoint, Result, Adverse Endpoint)

**Eplerenone** 

Pimephales promelas (Fathead Minnow) OECD 32 Day(s) NOEC 1 mg/L Survival Growth Daphnia magna (Water Flea) OECD 21 Day(s) NOEC 2.9 mg/L Reproduction

# 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.

Material Name: Eplerenone Tablets

Revision date: 22-Aug-2013

Page 9 of 11

Version: 1.4

# 15. REGULATORY INFORMATION

EU Indication of danger: Not classified

## **OSHA Label:**

Non-hazardous in accordance with international standards for workplace safety.

#### Canada - WHMIS: Classifications

#### WHMIS hazard class:

None required

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

# **Eplerenone**

California Proposition 65Not ListedStandard for the Uniform SchedulingSchedule 4

for Drugs and Poisons:

### Ferric oxide yellow

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
Present
257-098-5

### Ferric oxide red

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
215-168-2

### Microcrystalline cellulose

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
232-674-9

## **Croscarmellose sodium**

California Proposition 65
Australia (AICS):
Not Listed
Present

#### Lactose

California Proposition 65 Not Listed

Material Name: Eplerenone Tablets

Page 10 of 11

Revision date: 22-Aug-2013

Version: 1.4

# 15. REGULATORY INFORMATION

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

obligations of Register:

EU EINECS/ELINCS List 200-559-2

Talc (non-asbestiform)

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
238-877-9

Polysorbate 80

California Proposition 65

Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Present

Present

Magnesium stearate

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)
Australia (AICS):
Present
EU EINECS/ELINCS List
Present
209-150-3

Hydroxypropyl methylcellulose

California Proposition 65Not ListedInventory - United States TSCA - Sect. 8(b)PresentAustralia (AICS):PresentStandard for the Uniform SchedulingSchedule 4

for Drugs and Poisons:

Polyethylene glycol

California Proposition 65Not ListedInventory - United States TSCA - Sect. 8(b)PresentAustralia (AICS):PresentStandard for the Uniform SchedulingSchedule 3

for Drugs and Poisons:

Sodium lauryl sulfate

California Proposition 65Not ListedInventory - United States TSCA - Sect. 8(b)PresentAustralia (AICS):PresentStandard for the Uniform SchedulingSchedule 6

for Drugs and Poisons:

EU EINECS/ELINCS List 205-788-1

Titanium dioxide

California Proposition 65 carcinogen initial date 9/2/11 airborne, unbound particles of

respirable size

Inventory - United States TSCA - Sect. 8(b)PresentAustralia (AICS):PresentEU EINECS/ELINCS List236-675-5

Material Name: Eplerenone Tablets

Revision date: 22-Aug-2013

Page 11 of 11

Version: 1.4

# **16. OTHER INFORMATION**

Prepared by:

**Data Sources:** Pfizer proprietary drug development information. Publicly available toxicity information.

Reasons for Revision: Updated Section 8 - Exposure Controls / Personal Protection. Updated Section 12 - Ecological

Information. Updated Section 7 - Handling and Storage.

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.

**End of Safety Data Sheet**