

Revision date: 20-Jun-2016 Version: 3.1 Page 1 of 7

# **IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING**

**Product Identifier** 

Material Name: Pantoprazole Sodium for Injection

**Trade Name: PROTONIX** Not determined **Chemical Family:** 

Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Intended Use: Pharmaceutical product for the treatment of gastrointestinal disorders

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

## **HAZARDS IDENTIFICATION**

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

Acute Oral Toxicity: Category 4 Carcinogenicity: Category 1B Acute aquatic toxicity: Category 3

**US OSHA Specific - Classification** 

Physical Hazard: Combustible Dust

**Label Elements** 

Signal Word: Danger

H302 - Harmful if swallowed **Hazard Statements:** 

H350 - May cause cancer H402 - Harmful to aquatic life

May form combustible dust concentrations in air

Material Name: Pantoprazole Sodium for Injection Page 2 of 7
Revision date: 20-Jun-2016 Version: 3.1

**Precautionary Statements:** P201 - Obtain special instructions before use

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

P281 - Use personal protective equipment as required

P264 - Wash hands thoroughly after handling

P270 - Do not eat, drink or smoke when using this product

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

P301+ P312 - IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel

unwell

P330 - Rinse mouth P405 - Store locked up

P273 - Avoid release to the environment

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



Other Hazards 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**

Ingredient	CAS Number	EU EINECS/ELINCS List	GHS Classification	%
Pantoprazole Sodium	138786-67-1	Not Listed	Acute Tox.4 (H302) Carc.1B (H350) Aquatic Acute 3 (H402)	100

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

safety.

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.

\_\_\_\_\_

Page 3 of 7

Material Name: Pantoprazole Sodium for Injection

Revision date: 20-Jun-2016 Version: 3.1

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:

Indication of the Immediate Medical Attention and Special Treatment Needed

Notes to Physician: None

# 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.

**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 / Co

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.

**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**

Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes, skin and clothing. When handling, use appropriate personal protective equipment (see Section 8). Wash hands and any exposed skin after removal of PPE. Refer to Section 12 - Ecological Information, for information on potential effects on the environment. 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**

Material Name: Pantoprazole Sodium for Injection Page 4 of 7
Revision date: 20-Jun-2016 Version: 3.1

100000

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Pantoprazole Sodium** 

Pfizer OEL TWA-8 Hr: 300µg/m<sup>3</sup>

**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 Refer to applicable national standards and regulations in the selection and use of personal

**Equipment:** 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: 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 half mask, P3 filter). (Respirators must meet the standards in accordance with EN140, EN143, ASTM F2704-10 or international

equivalent.)

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:Freeze-dried powderColor:White to off-whiteOdor:No data available.Odor Threshold:No data available.

Molecular Formula: C16H14F2N3NaO4S Molecular Weight: 405.4

Solvent Solubility: No data available

Water solubility: 303 g/L

Water Solubility: No data available ph: No data available.

Melting/Freezing Point (°C): 149-150

Boiling Point (°C):

No data available.

Partition Coefficient: (Method, pH, Endpoint, Value)

Pantoprazole Sodium No data available Pantoprazole

Predicted 7.4 Log P 2.05

**Decomposition Temperature (°C):** No data available.

Evaporation Rate (Gram/s):

Vapor Pressure (kPa):

Vapor Density (g/ml):

Relative Density:

No data available

Flammablity:

Autoignition Temperature (Solid) (°C):No data availableFlammability (Solids):No data availableFlash Point (Liquid) (°C):No data availableUpper Explosive Limits (Liquid) (% by Vol.):No data availableLower Explosive Limits (Liquid) (% by Vol.):No data available

Material Name: Pantoprazole Sodium for Injection

Revision date: 20-Jun-2016 Version: 3.1

# 10. STABILITY AND REACTIVITY

Reactivity: No data available

**Chemical Stability:** Stable under normal conditions of use.

**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 various forms of the

active ingredients.

**Short Term:** Accidental ingestion may cause effects similar to those seen in clinical use.

Known Clinical Effects: Adverse effects most commonly reported in clinical use include headache, diarrhea, nausea,

and flatulence. May cause mild skin rash. Additionally weight changes, fatigue, malaise, insomnia, sleepiness (somnolence), weakness, and electrolyte imbalance may occur.

Page 5 of 7

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

## **Pantoprazole Sodium**

Rat Oral LD 50 747 mg/kg Mouse Oral LD 50 > 1000mg/kg Rat Intravenous LD 50 256mg/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.

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

### **Pantoprazole**

Reproductive & Fertility-Males Rat Oral 500 mg/kg/day NOEL No effects at maximum dose Reproductive & Fertility - Females Rat Oral 450 mg/kg/day NOEL No effects at maximum dose

Fertility and Embryonic Development Rat Oral 450 mg/kg/day NOEL Not Teratogenic Fertility and Embryonic Development Rabbit Oral 40 mg/kg/day NOEL Not Teratogenic

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

## **Pantoprazole**

Chromosome Aberration Human Lymphocytes Positive

Micronucleus Mouse Positive

Mammalian Cell Mutagenicity Chinese Hamster Ovary (CHO) cells Positive

In Vivo DNA Binding Assay Rat Equivocal

In Vivo Chromosome Aberration Rat Bone Marrow Negative

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

### **Pantoprazole**

24 Month(s) Rat Oral 0.5 mg/kg/day LOEL Tumors, Gastrointestinal system, Liver

24 Month(s) Rat Oral 5 mg/kg/day LOEL Tumors, Gastrointestinal system

24 Month(s) Mouse Oral 150 mg/kg/day LOEL Tumors, Liver 24 Month(s) Rat Oral 200 mg/kg/day LOEL Tumors, Thyroid

PZ01408

Material Name: Pantoprazole Sodium for Injection Page 6 of 7
Revision date: 20-Jun-2016 Version: 3.1

Revision date: 20-Jun-2016 Version: 3

# 11. TOXICOLOGICAL INFORMATION

Carcinogen Status: Not listed as a carcinogen by IARC, NTP or US OSHA.

# 12. ECOLOGICAL INFORMATION

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

avoided.

**Toxicity:** 

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

**Pantoprazole** 

Pseudokirchneriella subcapitata (Green Alga) OECD EC50 72 Hours 48 mg/L

Daphnia magna (Water Flea) OECD EC50 48 Hours >95 mg/L

Pimephales promelas (Fathead Minnow) OECD LC50 96 Hours >95 mg/L

Activated sludge OECD EC50 3 Hours > 1000 mg/L

Persistence and Degradability: No data available

**Bio-accumulative Potential:** No data available **Partition Coefficient: (Method, pH, Endpoint, Value)** 

**Pantoprazole** 

Predicted 7.4 Log P 2.05

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.

\_\_\_\_\_

Material Name: Pantoprazole Sodium for Injection Page 7 of 7
Revision date: 20-Jun-2016 Version: 3.1

Version 44:6. 20 Gain 2010

# 15. REGULATORY INFORMATION

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

**Pantoprazole Sodium** 

CERCLA/SARA 313 Emission reporting

California Proposition 65

EU EINECS/ELINCS List

Not Listed

Not Listed

# 16. OTHER INFORMATION

## Text of CLP/GHS Classification abbreviations mentioned in Section 3

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed Carcinogenicity-Cat.1B; H350 - May cause cancer Hazardous to the aquatic environment, acute toxicity-Cat.3; H402 - Harmful to aquatic life

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

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

Ingredients. Updated Section 16 - Other Information.

Revision date: 20-Jun-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**