

Revision date: 10-Nov-2014 Version: 2.0 Page 1 of 12

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

Product Identifier

Material Name: Pantoprazole Tablets

Trade Name: PROTONIX; NOXANTOR

Synonyms: Pantoprazole Delayed-Release Tablets

Chemical Family: Mixture

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 Ltd
Pfizer Pharmaceuticals Group Ramsgate Road
235 East 42nd Street Sandwich, Kent
New York, New York 10017 CT13 9NJ

1-800-879-3477 United Kingdom +00 44 (0)1304 616161

Emergency telephone number: Emergency telephone number:

CHEMTREC (24 hours): 1-800-424-9300 International CHEMTREC (24 hours): +1-703-527-3887

Contact E-Mail: pfizer-MSDS@pfizer.com

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

GHS - Classification

Carcinogenicity: Category 1B

EU Classification:

EU Indication of danger: Carcinogenic: Category 2

EU Risk Phrases:

R45 - May cause cancer.

Label Elements

Signal Word: Danger

Hazard Statements: H350 - May cause cancer

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

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

Material Name: Pantoprazole Tablets

Revision date: 10-Nov-2014

Version: 2.0



Other Hazards
Australian Hazard Classification
(NOHSC):

No data available

Hazardous Substance. Non-Dangerous Goods.

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	EU Classification	GHS Classification	%
Calcium stearate	1592-23-0	List 216-472-8	Not Listed	Not Listed	*
Pantoprazole Sodium Sesquihydrate	164579-32-2	Not Listed	Xn:R22	Acute Tox.4 (H302)	22
antoprazoro obaram oboquinyarato	101010 02 2	Tiot Liotou	Carc. Cat.2 ;R45	Carc.1B (H350) Aquatic Acute 3	
Propylene glycol	57-55-6	200-338-0	Not Listed	(H402) Not Listed	*
Sodium carbonate	498-19-8	Not Listed	Not Listed	Not Listed	*
Sodium lauryl sulfate	151-21-3	205-788-1	Not Listed	Not Listed	*
Titanium dioxide	13463-67-7	236-675-5	Not Listed	Not Listed	*

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Crospovidone	9003-39-8	Not Listed	Not Listed	Not Listed	*
Ferric oxide yellow	51274-00-1	257-098-5	Not Listed	Not Listed	*
Hydroxypropyl methylcellulose	9004-65-3	Not Listed	Not Listed	Not Listed	*
Mannitol	69-65-8	200-711-8	Not Listed	Not Listed	*
Methacrylic acid copolymer	25086-15-1	Not Listed	Not Listed	Not Listed	*
Polysorbate 80	9005-65-6	Not Listed	Not Listed	Not Listed	*
Povidone	9003-39-8	Not Listed	Not Listed	Not Listed	*
Triethyl Citrate	77-93-0	201-070-7	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

D700404

Material Name: Pantoprazole Tablets Page 3 of 12 Revision date: 10-Nov-2014 Version: 2.0

4. FIRST AID MEASURES

Description of First Aid Measures

Eve 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

Identification and/or Section 11 - Toxicological Information. Exposure:

Medical Conditions None known

Aggravated by Exposure:

Indication of the Immediate Medical Attention and Special Treatment Needed

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:

Fire / Explosion Hazards: 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 / Contain the source of spill if it is safe to do so. Collect spilled material by a method that Collecting:

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

Non-essential personnel should be evacuated from affected area. Report emergency Large Spills:

situations immediately. Clean up operations should only be undertaken by trained personnel.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Material Name: Pantoprazole Tablets Page 4 of 12
Revision date: 10-Nov-2014 Version: 2.0

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.

Calcium stearate

ACGIH Threshold Limit Value (TWA)

Lithuania OEL - TWA

Sweden OEL - TWAs

10 mg/m³

5 mg/m³

5 mg/m³

Pantoprazole Sodium Sesquihydrate

Pfizer OEL TWA-8 Hr: 300µg/m³

Propylene glycol

Australia TWA 150 ppm 474 mg/m³

10 mg/m³ 150 ppm

Ireland OEL - TWAs 150 ppm 470 mg/m³

10 mg/m³ 7 mg/m³

Latvia OEL - TWA 7 mg/m³
Lithuania OEL - TWA 7 mg/m³

Sodium lauryl sulfate

Pfizer OEL TWA-8 Hr: 0.3 mg/m³

Titanium dioxide

10 mg/m³ **ACGIH Threshold Limit Value (TWA)** Listed **ACGIH OELs - Notice of Intended Changes Australia TWA** 10 mg/m³ **Austria OEL - MAKs** 5 mg/m^3 10 mg/m³ **Belgium OEL - TWA** 10.0 mg/m³ **Bulgaria OEL - TWA** 6 mg/m³ **Denmark OEL - TWA Estonia OEL - TWA** 5 mg/m³ France OEL - TWA 10 mg/m³ 10 ma/m³ **Greece OEL - TWA** 5 mg/m³

Ireland OEL - TWAs

10 mg/m³
4 mg/m³

Latvia OEL - TWA 10 mg/m³
Lithuania OEL - TWA 5 mg/m³
OSHA - Final PELS - TWAs: 15 mg/m³

PZ00404

Material Name: Pantoprazole Tablets Page 5 of 12
Revision date: 10-Nov-2014 Version: 2.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Poland OEL - TWA 10.0 mg/m³ Portugal OEL - TWA 10 mg/m³ 10 mg/m³ Romania OEL - TWA 10 mg/m³ **Russia OEL - TWA** 10 mg/m³ Spain OEL - TWA 5 mg/m³ **Sweden OEL - TWAs Switzerland OEL -TWAs** 3 mg/m³ Vietnam OEL - TWAs 6 mg/m³ 5 mg/m³

Exposure Controls

Engineering Controls: 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. Engineering controls should be used as the primary means to control exposures.

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: 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.

Molecular Weight:

Mixture

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Tablet Color: Yellow

Odor: No data available. Odor Threshold: No data available.

Molecular Formula: Mixture

Solvent Solubility:
Water Solubility:
PH:
No data available
No data available
No data available.
No data available.
No data available.
No data available
No data available
Partition Coefficient: (Method, pH, Endpoint, Value)

Pantoprazole

Predicted 7.4 Log P 2.05

Pantoprazole Sodium
No data available
Calcium stearate
No data available
Ferric oxide yellow
No data available

Hydroxypropyl methylcellulose

No data available
Polysorbate 80
No data available
Propylene glycol
No data available
Titanium dioxide

Material Name: Pantoprazole Tablets Page 6 of 12
Revision date: 10-Nov-2014 Version: 2.0

9. PHYSICAL AND CHEMICAL PROPERTIES

No data available

Triethyl Citrate

No data available

Povidone

No data available

Methacrylic acid copolymer

No data available

Sodium lauryl sulfate

No data available

Crospovidone

No data available

Mannitol

No data available

Sodium carbonate

No data available

Pantoprazole Sodium Sesquihydrate

No data available

Decomposition Temperature (°C): No data available.

Evaporation Rate (Gram/s):

Vapor Pressure (kPa):

Vapor Density (g/ml):

Relative Density:

No data available

Flammablity:

Autoİgnition 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

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. The remaining information describes the potential hazards of the individual

ingredients.

Short Term: May be harmful if swallowed. (based on animal data) 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.

Material Name: Pantoprazole Tablets Page 7 of 12
Revision date: 10-Nov-2014 Version: 2.0

11. TOXICOLOGICAL INFORMATION

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

Hydroxypropyl methylcellulose

Rat Oral LD50 > 10,000 mg/kg

Polysorbate 80

Rat Oral LD50 25 g/kg

Propylene glycol

Rat Oral LD 50 22,000 mg/kg

Mouse Oral LD 50 24,900mg/kg

Rabbit Dermal LD 50 20,800mg/kg

Titanium dioxide

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

Povidone

Rat Oral LD50 100 g/kg

Sodium lauryl sulfate

Rat Oral LD50 1288 mg/kg

Mannitol

Rat Oral LD 50 13500 mg/kg Mouse Oral LD 50 22 g/kg

Pantoprazole Sodium Sesquihydrate

Rat Oral LD50 ~ 900 mg/kg Mouse Oral LD50 > 700mg/kg Rat Intravenous LD50 240mg/kg Mouse Intravenous LD50 ~ 370mg/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)

Propylene glycol

Skin Irritation Rabbit Mild Eye Irritation Rabbit Mild

Sodium lauryl sulfate

Eye Irritation Rabbit Moderate Skin Irritation Rabbit Mild Moderate

Skin Sensitization - GPMT Guinea Pig Negative

D700404

Page 8 of 12

Material Name: Pantoprazole Tablets

Revision date: 10-Nov-2014 Version: 2.0

11. TOXICOLOGICAL INFORMATION

Skin Sensitization - LLNA Mouse Negative

Pantoprazole Sodium Sesquihydrate

1 Year(s) Rat Oral 300 mg/kg/day LOEL Thyroid 1 Year(s) Dog Oral 60 mg/kg/day LOEL Thyroid

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 450 mg/kg/day No effects at maximum dose Rat Oral NOEL 450 mg/kg/day Fertility and Embryonic Development Not Teratogenic Rat Oral NOEL Fertility and Embryonic Development 40 mg/kg/day **NOEL** Not Teratogenic Rabbit Oral

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

Sodium lauryl sulfate

Bacterial Mutagenicity (Ames) Salmonella Negative

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

Pantoprazole

24 Month(s) Rat Oral 0.5 mg/kg/day Tumors, Gastrointestinal system, Liver LOEL 24 Month(s) LOEL Tumors, Gastrointestinal system Rat Oral 5 mg/kg/day Mouse Oral 150 mg/kg/day LOEL Tumors, Liver 24 Month(s) 24 Month(s) Rat Oral 200 mg/kg/day LOEL Tumors, Thyroid

Carcinogen Status: See below

Titanium dioxide

IARC: Group 2B (Possibly Carcinogenic to Humans)

Povidone

IARC: Group 3 (Not Classifiable)

Crospovidone

IARC: Group 3 (Not Classifiable)

12. ECOLOGICAL INFORMATION

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

avoided.

Toxicity:

PZ00404

Material Name: Pantoprazole Tablets

Revision date: 10-Nov-2014 Version: 2.0

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

OECD Activated sludge EC50 > 1000 mg/L3 Hours

Sodium lauryl sulfate

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

No data available Persistence and Degradability:

Bio-accumulative Potential:

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

Pantoprazole

Predicted 7.4 Log P 2.05

No data available Mobility in Soil:

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.

Page 9 of 12

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

Canada - WHMIS: Classifications WHMIS hazard class:

Class D, Division 2, Subdivision A

Page 10 of 12

Material Name: Pantoprazole Tablets

Revision date: 10-Nov-2014 Version: 2.0

15. REGULATORY INFORMATION



Calcium stearate

Crospovidone

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

Present

EU EINECS/ELINCS List

Not Listed

Ferric oxide yellow

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

Present

EU EINECS/ELINCS List

Not Listed

Not Listed

Present

257-098-5

Hydroxypropyl methylcellulose

EU EINECS/ELINCS List

CERCLA/SARA 313 Emission reporting

California Proposition 65
Inventory - United States TSCA - Sect. 8(b)

Australia (AICS):

Standard for the Uniform Scheduling
for Drugs and Poisons:

Not Listed

Not Listed

Not Listed

Not Listed

Not Listed

Schedule 4

Mannitol

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

200-711-8

Methacrylic acid copolymer

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

EU EINECS/ELINCS List

Not Listed

Not Listed

Not Listed

Pantoprazole Sodium Sesquihydrate

Not Listed

Material Name: Pantoprazole Tablets Page 11 of 12 Revision date: 10-Nov-2014 Version: 2.0

15. REGULATORY I	INFORMATION
------------------	-------------

Not Listed **CERCLA/SARA 313 Emission reporting California Proposition 65** Not Listed **EU EINECS/ELINCS List** Not Listed

Polysorbate 80

Not Listed **CERCLA/SARA 313 Emission reporting California Proposition 65** Not Listed Present Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): **EU EINECS/ELINCS List** Not Listed

Povidone

CERCLA/SARA 313 Emission reporting Not Listed **California Proposition 65** Not Listed Inventory - United States TSCA - Sect. 8(b) Present Present Australia (AICS): **EU EINECS/ELINCS List** Not Listed

Propylene glycol

CERCLA/SARA 313 Emission reporting Not Listed **California Proposition 65** Not Listed Present Inventory - United States TSCA - Sect. 8(b) Australia (AICS): Present **EU EINECS/ELINCS List** 200-338-0

Sodium carbonate

CERCLA/SARA 313 Emission reporting Not Listed **California Proposition 65** Not Listed **EU EINECS/ELINCS List** Not Listed

Sodium lauryl sulfate

Not Listed **CERCLA/SARA 313 Emission reporting California Proposition 65** Not Listed Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present Standard for the Uniform Scheduling Schedule 6 for Drugs and Poisons:

EU EINECS/ELINCS List 205-788-1

Titanium dioxide

CERCLA/SARA 313 Emission reporting Not Listed

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

respirable size

Present Inventory - United States TSCA - Sect. 8(b) Australia (AICS): Present **EU EINECS/ELINCS List** 236-675-5

Triethyl Citrate

Not Listed **CERCLA/SARA 313 Emission reporting** Not Listed California Proposition 65 Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present **EU EINECS/ELINCS List** 201-070-7

Material Name: Pantoprazole Tablets Page 12 of 12
Revision date: 10-Nov-2014 Version: 2.0

revision date. 10-nov-2014

15. REGULATORY INFORMATION

16. OTHER INFORMATION

Text of R phrases and 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

Carcinogenic: Category 2

Xn - Harmful

R22 - Harmful if swallowed. R45 - May cause cancer.

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

Publicly available toxicity information.

Reasons for Revision: Updated Section 2 - Hazard Identification. Updated Section 8 - Exposure Controls / Personal

Protection. Updated Section 11 - Toxicology Information. Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking. Updated Section 4 - First Aid Measures. Updated Section 6 - Accidental Release Measures. Updated Section 5 - Fire Fighting Measures. Updated Section 7 - Handling and Storage. Updated Section 3 - Composition / Information on Ingredients. Updated Section 9 - Physical and Chemical

Properties. Updated Section 16 - Other Information.

Revision date: 10-Nov-2014

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
