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

**Product Identifier** 

Material Name: Procardia® (Nifedipine) soft gelatin capsules

Trade Name: Procardia
Chemical 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), angina

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 Not classified as hazardous

**EU Classification:** 

EU Indication of danger: Not classified

**Label Elements** 

Hazard Statements: Not classified in accordance with international standards for workplace safety.

Other Hazards

Australian Hazard Classification Non

(NOHSC):

No data available

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 product or its ingredients 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** 

Material Name: Procardia® (Nifedipine) soft gelatin capsules

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**COMPOSITION / INFORMATION ON INGREDIENTS** Ingredient **CAS Number EU Classification GHS** % EU **EINECS/ELINCS** Classification List Nifedipine 21829-25-4 244-598-3 Xn;R22 Acute tox.4 (H302) 2.6 Glycerin, USP 56-81-5 200-289-5 Not Listed Not Listed

Ingredient	CAS Number	EU EINECS/ELINCS List	EU Classification	GHS Classification	%
Polyethylene glycol 400	25322-68-3	Not Listed	Not Listed	Not Listed	*
Peppermint oil	8006-90-4	Not Listed	Not Listed	Not Listed	*
Sodium saccharin USP	128-44-9	204-886-1	Not Listed	Not Listed	**

Additional Information: \* Proprietary

\*\*Sodium saccharin is contained in solution for 10 mg capsules only.

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

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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

# 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.

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:** Use carbon dioxide, dry chemical, or water spray.

Special Hazards Arising from the Substance or Mixture

Hazardous Combustion Formation of toxic gases is possible during heating or fire.

**Products:** 

Fire / Explosion Hazards: Not applicable

**Advice for Fire-Fighters** 

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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**

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). 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 product

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### **Control Parameters**

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

# **Nifedipine**

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

Polyethylene glycol 400

 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/m³

 Slovenia OEL - TWA
 1000 mg/m³

 Switzerland OEL -TWAs
 1000 ppm

Glycerin, USP

Australia TWA 10 mg/m³
Belgium OEL - TWA 10 mg/m³
Czech Republic OEL - TWA 10 mg/m³
Estonia OEL - TWA 10 mg/m³
Finland OEL - TWA 20 mg/m³
France OEL - TWA 10 mg/m³
Germany (DFG) - MAK 50 mg/m³

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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

 Greece OEL - TWA
 10 mg/m³

 Ireland OEL - TWAs
 10 mg/m³

 OSHA - Final PELS - TWAs:
 15 mg/m³

 Poland OEL - TWA
 10 mg/m³

 Portugal OEL - TWA
 10 mg/m³

 Spain OEL - TWA
 10 mg/m³

 Switzerland OEL -TWAs
 50 mg/m³

Analytical Method: Analytical method available for Nifedipine. Contact Pfizer Inc for further information.

**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.

**Molecular Weight:** 

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:Soft gelatin capsuleColor:10 mg: Orange

20 mg: Light brown

Mixture

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
No data available.
Partition Coefficient: (Method, pH, Endpoint, Value)

Glycerin, USP
No data available
Peppermint oil
No data available

Polyethylene glycol 400

No data available

Sodium saccharin USP

No data available

**Nifedipine** 

Measured N/A Log P 2.20

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

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

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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.):

Polymerization:

No data available
No data available
Will not occur

# 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 the individual

ingredients.

**Short Term:** Antihypertensive drug: has blood pressure-lowering properties

May cause eye and skin irritation. May be harmful if swallowed. (based on components) . Individuals sensitive to this chemical or other materials in its chemical class may develop allergic reactions. Exposure to sunlight following contact may result in skin reactions.

Known Clinical Effects: Ingestion of this material may cause effects similar to those seen in clinical use including

hypotension (low blood pressure), dizziness, headache and drowsiness.

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

Glycerin, USP

Mouse Oral LD50 4090 mg/kg
Rat Oral LD50 12.6 g/kg
Rabbit Dermal LD50 > 10 g/kg
Rat Inhalation LC50 1hr > 570 mg/m³

Rat Dermal LD 50 > 21.9 g/kg

Peppermint oil

Rat Oral LD 50 2426 mg/kg Mouse Oral LD 50 2490mg/kg

Sodium saccharin USP

Mouse Oral LD50 17.5 g/kg Rat Oral LD50 14.2 - 17g/kg

**Nifedipine** 

Mouse Oral LD50 454 mg/kg Rat Oral LD50 1022mg/kg

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Mouse IV LD50 4.2mg/kg Rat IV LD50 15.5mg/kg

**Acute Toxicity Comments:** 

A greater than symbol (>) indicates that the toxicity endpoint being tested was not achievable

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at the highest dose used in the test.

### Irritation / Sensitization: (Study Type, Species, Severity)

Glycerin, USP

Eye Irritation Rabbit Mild

### Polyethylene glycol 400

Eye Irritation Rabbit Mild Skin Irritation Rabbit Mild

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

### **Nifedipine**

13 Week(s) Rat Oral100 mg/kg/day **NOAEL** No effects at maximum dose Oral 50 mg/kg/day 13 Week(s) Dog NOAEL No effects at maximum dose Oral 125 mg/kg/day NOAEL No effects at maximum dose 4 Week(s) Dog 4 Week(s) Dog Intravenous 0.6 mg/kg/day NOAEL No effects at maximum dose Oral 100 mg/kg/day No effects at maximum dose 1 Year(s) Dog **NOAEL** 

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

### **Nifedipine**

Reproductive & Fertility Rat Oral3 mg/kg/day NOAEL Reproductive toxicity, Embryotoxicity, Postnatal mortality, Maternal toxicity

Peri-/Postnatal Development Rat Oral 4 mg/kg/day NOAEL Reproductive toxicity, Fetotoxicity, Maternal Toxicity

Peri-/Postnatal Development Rat Oral 3 mg/kg/day NOAEL Embryotoxicity

Embryo / Fetal Development Rat Oral 10 mg/kg/day NOAEL Maternal Toxicity, Fetotoxicity, Developmental toxicity

Embryo / Fetal Development Rabbit Oral 10 mg/kg/day LOAEL Developmental toxicity

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

# **Nifedipine**

In Vivo Dominant Lethal Assay Mouse Negative

In Vivo Cytogenetics Hamster Negative
In Vivo Micronucleus Mouse Negative

Bacterial Mutagenicity (Ames) Salmonella Negative

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

**Nifedipine** 

2 Year(s) Rat Oral 156-210 mg/kg/day NOAEL Not carcinogenic

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

See below

Sodium saccharin USP

IARC: Group 3 (Not Classifiable)

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# 12. ECOLOGICAL INFORMATION

**Environmental Overview:** The environmental characteristics of this mixture have not been fully evaluated. Releases to

the environment should be avoided.

**Toxicity:** 

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

Glycerin, USP

Oncorhynchus mykiss (Rainbow Trout) LD50 96 Hours 50 mg/L

Daphnia magna (Water Flea) EC50 24 Hours >500 mg/L

**Nifedipine** 

Brachydanio rerio (Zebra fish) LC50 96 Hours > 5.77 mg/L Daphnia magna (Water Flea) EC50 48 Hours > 3.88 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)

**Nifedipine** 

Activated sludge EC50 > 10000 mg/L

Persistence and Degradability: No data available

Bio-accumulative Potential: No data available

**Nifedipine** 

Measured N/A Log P 2.20

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.

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# 15. REGULATORY INFORMATION

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

### 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.

**Nifedipine** 

CERCLA/SARA 313 Emission reporting Not Listed

California Proposition 65 developmental toxicity initial date 1/29/99

female reproductive toxicity 1/29/99

male reproductive toxicity initial date 1/29/99

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Australia (AICS): Present
Standard for the Uniform Scheduling Schedule 4

for Drugs and Poisons:

EU EINECS/ELINCS List 244-598-3

Polyethylene glycol 400

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Australia (AICS):

Standard for the Uniform Scheduling

Not Listed

Schedule 3

for Drugs and Poisons:

EU EINECS/ELINCS List Not Listed

Peppermint oil

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

Sodium saccharin USP

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

204-886-1

Glycerin, USP

CERCLA/SARA 313 Emission reporting

California Proposition 65

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

Not Listed
Present

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# 15. REGULATORY INFORMATION

Australia (AICS):

Present **REACH - Annex V - Exemptions from the** 

obligations of Register:

Present if not chemically modified, except they meet the criteria for classification as dangerous according to Directive 67/548/EEC, except those only classified as flammable [R10], as a skin irritant [R38] or as an eye irritant [R36], except they are persistent, bioaccumulative, and toxic or very persistent and very

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bioaccumulative in accordance with the criteria set out in Annex XIII, except they were identified in accordance with Article 59[1] at least two years previously as substances giving rise to an

equivalent level of concern

**EU EINECS/ELINCS List** 200-289-5

# 16. OTHER INFORMATION

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

Acute toxicity, oral-Cat.4; H302 - Harmful if swallowed

Xn - Harmful

R22 - Harmful if swallowed.

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

Reasons for Revision: Updated Section 2 - Hazard Identification. Updated Section 7 - Handling and Storage.

**Revision date:** 12-Apr-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**