

Revision date: 21-Dec-2011 Version: 4.0 Page 1 of 10

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

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Emergency telephone number:
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Material Name: Caduet® (amlodipine besylate/atorvastatin calcium) Tablets-2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10 mg/80 mg

Trade Name: CADUET Chemical Family: Mixture

Intended Use: Pharmaceutical product for the treatment of high blood pressure (hypertension), high

cholesterol (hyperlipidemia).

### 2. HAZARDS IDENTIFICATION

**Appearance:** 2.5 mg/40 mg: White film-coated tablets 5 mg/40 mg: White film-coated tablets 5 mg/80 mg:

White film-coated tablets 10 mg/80 mg: Blue film-coated tablets

**Additional Hazard Information:** 

**Short Term:** May cause eye irritation; May be harmful if swallowed. (based on components) .

Antihypertensive drug: has blood pressure-lowering properties

**Long Term:** Repeat-dose studies in animals have shown a potential to cause adverse effects on liver. **Known Clinical Effects:** Adverse effects associated with therapeutic use of amlodipine include headache, swelling,

dizziness, flushing, and palpitations. The most common adverse effects seen with the therapeutic use of atorvastatin include constipation, flatulence, upset stomach, and abdominal pain. Therapeutic use of atorvastatin has been associated with changes in liver function and

muscle aches or weakness.

**EU Classification** 

EU Indication of danger: Dangerous for the Environment

**EU Risk Phrases:** 

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

**Australian Hazard Classification** 

(NOHSC):

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.

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 2 of 10

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

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Revision date: 21-Dec-2011 Version: 4.0

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### **Hazardous**

TAZAT GOGS						
Ingredient	CAS Number	<b>EU EINECS/ELINCS List</b>	EU Classification	%		
Amlodipine besylate	111470-99-6	Not Listed	N;R50/53	0.87-1.74		
			Xn;R22			
			Xi;R41			
Atorvastatin calcium	134523-03-8	Not Listed	R52/53	10.85		
Calcium carbonate	471-34-1	207-439-9	Not Listed	*		
Magnesium stearate	557-04-0	209-150-3	Not Listed	*		
Microcrystalline cellulose	9004-34-6	232-674-9	Not Listed	*		
Silicon dioxide, NF	7631-86-9	231-545-4	Not Listed	*		
		418-260-2				
Starch, pregelatinized	9005-25-8	232-679-6	Not Listed	*		

Ingredient	CAS Number	<b>EU EINECS/ELINCS List</b>	<b>EU Classification</b>	%
Croscarmellose sodium	74811-65-7	Not Listed	Not Listed	*
Hydroxypropyl cellulose	9004-64-2	Not Listed	Not Listed	*
Opadry blue	NOT ASSIGNED	Not Listed	Not Listed	*
Opadry clear	NOT ASSIGNED	Not Listed	Not Listed	*
Opadry white	NOT ASSIGNED	Not Listed	Not Listed	*
Polysorbate 80	9005-65-6	Not Listed	Not Listed	*

Additional Information: \* Proprietary

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

safety.

For the full text of the R phrases mentioned in this Section, see Section 16

# 4. 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.

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.

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 3 of 10

calcium) Tablets-

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Revision date: 21-Dec-2011 Version: 4.0

Fire Fighting Procedures: During all fire fighting activities, wear appropriate protective equipment, including self-

contained breathing apparatus.

Fire / Explosion Hazards: Not determined

### 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.

**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 hands and any exposed skin after removal of PPE. 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. Releases to the environment should be avoided. Refer to Section 12 - Ecological Information, for information

on potential effects on the environment. Store as directed by product packaging.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Amlodipine besylate

**Storage Conditions:** 

Pfizer OEL TWA-8 Hr: 100µg/m<sup>3</sup>

Atorvastatin calcium

Pfizer OEL TWA-8 Hr: 50 μg/m<sup>3</sup>

Calcium carbonate

 Bulgaria OEL - TWA
 10.0 mg/m³

 France OEL - TWA
 10 mg/m³

 Latvia OEL - TWA
 6 mg/m³

 Poland OEL - TWA
 10 mg/m³

 Portugal OEL - TWA
 10 mg/m³

 Spain OEL - TWA
 10 mg/m³

Magnesium stearate

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 4 of 10

calcium) Tablets-

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Revision date: 21-Dec-2011 Version: 4.0

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION 10 mg/m<sup>3</sup> **ACGIH Threshold Limit Value (TWA)** Lithuania OEL - TWA 5 mg/m<sup>3</sup> Sweden OEL - TWAs 5 mg/m<sup>3</sup> Microcrystalline cellulose 10 mg/m<sup>3</sup> **ACGIH Threshold Limit Value (TWA)** 10 mg/m<sup>3</sup> **Australia TWA** $10 \text{ mg/m}^3$ **Belgium OEL - TWA** 10 mg/m<sup>3</sup> Estonia OEL - TWA France OEL - TWA 10 mg/m<sup>3</sup> Ireland OEL - TWAs 10 mg/m<sup>3</sup> 4 mg/m<sup>3</sup> Latvia OEL - TWA $2 \text{ mg/m}^3$ **OSHA - Final PELS - TWAs:** 15 mg/m<sup>3</sup> Portugal OEL - TWA 10 mg/m<sup>3</sup> 10 mg/m<sup>3</sup> Romania OEL - TWA Spain OEL - TWA 10 mg/m<sup>3</sup> Silicon dioxide, NF $2 \text{ mg/m}^3$ **Australia TWA** 4 mg/m<sup>3</sup> **Austria OEL - MAKs** 0.1 mg/m<sup>3</sup> Czech Republic OEL - TWA 4.0 mg/m<sup>3</sup> 2 mg/m<sup>3</sup> **Estonia OEL - TWA** 4 mg/m<sup>3</sup> Germany - TRGS 900 - TWAs Germany (DFG) - MAK 4 mg/m<sup>3</sup> inhalable fraction **Ireland OEL - TWAs** $6 \text{ mg/m}^3$ 2.4 mg/m<sup>3</sup> $1 \text{ mg/m}^3$ Latvia OEL - TWA **OSHA - Final PELs - Table Z-3 Mineral D:** 20 mppcf Listed Slovakia OEL - TWA $4.0 \text{ mg/m}^{3}$ Slovenia OEL - TWA 4 mg/m<sup>3</sup> Starch, pregelatinized **ACGIH Threshold Limit Value (TWA)** 10 mg/m<sup>3</sup> 10 mg/m<sup>3</sup> Australia TWA 10 mg/m<sup>3</sup> **Belgium OEL - TWA Bulgaria OEL - TWA** 10.0 mg/m<sup>3</sup> 4.0 mg/m<sup>3</sup> Czech Republic OEL - TWA 10 mg/m<sup>3</sup> **Greece OEL - TWA** 5 mg/m<sup>3</sup> Ireland OEL - TWAs 10 ma/m<sup>3</sup> $4 \text{ mg/m}^3$

15 mg/m<sup>3</sup>

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

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

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

**OSHA - Final PELS - TWAs:** 

Portugal OEL - TWA

Slovakia OEL - TWA

Spain OEL - TWA

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 5 of 10

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

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Revision date: 21-Dec-2011 Version: 4.0

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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.

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

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.

**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:Film-coated tabletsColor:White BlueMolecular Formula:MixtureMolecular Weight:Mixture

Polymerization: Will not occur

# 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)

Atorvastatin calcium

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

Calcium carbonate

Rat Oral LD50 6450 mg/kg

Microcrystalline cellulose

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

057

Material Name: Caduet® (amlodipine besylate/atorvastatin

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Revision date: 21-Dec-2011 Version: 4.0

# 11. TOXICOLOGICAL INFORMATION

#### Magnesium stearate

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

#### Silicon dioxide, NF

Rat Oral LD50 10 g/kg

### Polysorbate 80

Rat Oral LD50 25 g/kg

#### Amlodipine besylate

Rat (M) Oral LD50 393 mg/kg Rat (F) Oral LD50 686 mg/kg

**Acute Toxicity Comments:** 

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

Page 6 of 10

at the highest dose used in the test.

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

#### Atorvastatin calcium

Skin Sensitization - Beuhler Guinea Pig Negative Skin Irritation Rabbit Non-irritating

Eye Irritation Rabbit Mild

### Microcrystalline cellulose

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

### Amlodipine besylate

Eye Irritation Rabbit Severe Skin Irritation Rabbit Non-irritating

Skin Sensitization - GPMT Guinea Pig Negative

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

### Atorvastatin calcium

104 Week(s) Dog Oral 10 mg/kg/day LOAEL Liver 13 Week(s) Mouse Oral 100 mg/kg/day LOAEL Liver

52 Week(s) Rat Oral 5 mg/kg/day NOAEL Liver

13 Week(s) Rat Oral 5 (male); 20 (female) mg/kg/day NOAEL Liver

# Amlodipine besylate

3 Month(s) Rat Oral 3 mg/kg/day NOAEL Adrenal gland, Heart

1 Month(s) Rat Oral 3.5 mg/kg/day LOEL Heart

1 Year(s) Rat Oral 2 mg/kg/day NOAEL Adrenal gland, Heart

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

#### Atorvastatin calcium

Reproductive & Fertility Rat Oral 20 mg/kg/day NOAEL Negative

057

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 7 of 10

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

mg/80 mg

Revision date: 21-Dec-2011 Version: 4.0

### 11. TOXICOLOGICAL INFORMATION

Fertility and Embryonic Development Rat Oral 100 mg/kg/day NOAEL Negative

Embryo / Fetal Development Rat Oral 100 mg/kg/day NOAEL Not Teratogenic, Maternal Toxicity

Embryo / Fetal Development Rabbit Oral 10 mg/kg/day NOAEL Not Teratogenic, Maternal Toxicity, Fetotoxicity

Peri-/Postnatal Development Rat Oral 20 mg/kg/day NOAEL Fetotoxicity

### Amlodipine besylate

Fertility and Embryonic Development Rat Oral 25 mg/kg/day NOAEL Not teratogenic, Maternal toxicity

Peri-/Postnatal Development Oral 4 mg/kg/day NOAEL Fetotoxicity, Fetal mortality Oral Prenatal & Postnatal Development Rat 25 mg/kg/day NOAEL Not Teratogenic Prenatal & Postnatal Development Rabbit Oral 25 mg/kg/day NOAEL Not Teratogenic

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

### Atorvastatin calcium

In Vitro Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative

In Vivo Micronucleus Mouse Bone Marrow Negative

#### Amlodipine besylate

In Vitro Bacterial Mutagenicity (Ames) Salmonella, E. coli Negative

In Vivo Cytogenetics Mouse Bone Marrow Negative

In Vitro Chromosome Aberration Human Lymphocytes Negative

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

#### Atorvastatin calcium

104 Week(s) Mouse Oral 200 mg/kg/day NOAEL Not carcinogenic 104 Week(s) Rat Oral 100 mg/kg/day NOAEL Not carcinogenic

### Amlodipine besylate

24 Month(s) Rat Oral, in feed 2.5 mg/kg/day NOAEL Not carcinogenic, No effects at maximum dose

24 Month(s) Mouse Oral, in feed 0.5 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.

Silicon dioxide, NF

IARC: Group 3 (Not Classifiable)

### 12. ECOLOGICAL INFORMATION

Environmental Overview: This formulation has not been tested as a whole, the following apply to component

substance(s):

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

### Atorvastatin calcium

Daphnia magna (Water Flea) EC50 48 Hours 200 mg/L

Oncorhynchus mykiss (Rainbow Trout) OECD LC50 96 Hours > 92 mg/L Pseudokirchneriella subcapitata (Green Alga) OECD EbC50 72 Hours 75 mg/L

Daphnia magna (Water Flea) OECD NOEC 21 Days 0.14 mg/L

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 8 of 10

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

mg/80 mg

Revision date: 21-Dec-2011 Version: 4.0

# 12. ECOLOGICAL INFORMATION

Pimephales promelas (Fathead Minnow) OECD NOEC 32 Days 0.45 mg/L

#### Amlodipine besylate

Daphnia magna (Water Flea) OECD EC50 48 Hours 9.9 mg/L

Oncorhynchus mykiss (Rainbow Trout) OECD LC50 96 Hours 14 mg/L

Green algae OECD EbC50 72 Hours 0.28 mg/L Green Algae OECD ErC50 72 Hours > 0.91 mg/L

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

solubility. Since the substance is insoluble in aqueous solutions above this concentration, an

acute ecotoxicity value (i.e. LC/EC50) is not achievable.

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

#### Atorvastatin calcium

Aspergillus niger (Fungus) MIC > 1000 mg/L

Trichoderma viride (Fungus) MIC > 1000 mg/L

Clostridium perfingens (Bacterium) MIC 100 mg/L

Activated sludge OECD EC50 >1000 mg/L

#### Amlodipine besylate

Nostoc sp. (Freshwater Cyanobacteria) MIC 20 mg/L
Aspergillus Niger MIC > 100 mg/L
Trichoderma viride MIC > 100 mg/L
Clostridium perfingens MIC >100 mg/L
Bacillus subtilis MIC 80 mg/L

### 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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Material Name: Caduet® (amlodipine besylate/atorvastatin

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

mg/80 mg

Revision date: 21-Dec-2011 Version: 4.0

# 15. REGULATORY INFORMATION

**EU** Indication of danger: Dangerous for the Environment

**EU Risk Phrases:** 

R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

Page 9 of 10

environment.

#### **OSHA Label:**

Canada - WHMIS: Classifications

WHMIS hazard class:

Class D, Division 2, Subdivision B



Calcium carbonate

Present Inventory - United States TSCA - Sect. 8(b) Australia (AICS): Present **EU EINECS/ELINCS List** 207-439-9

**Croscarmellose sodium** 

Australia (AICS): Present

Hydroxypropyl cellulose

Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present

Magnesium stearate

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

Microcrystalline cellulose

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

Polysorbate 80

Inventory - United States TSCA - Sect. 8(b) Present Australia (AICS): Present

Material Name: Caduet® (amlodipine besylate/atorvastatin Page 10 of 10

calcium) Tablets-

2.5 mg/20 mg, 2.5 mg/40 mg, 5 mg/40 mg, 5 mg/80 mg, and 10

mg/80 mg

Revision date: 21-Dec-2011 Version: 4.0

# 15. REGULATORY INFORMATION

Silicon dioxide, NF

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

Australia (AICS):

Fresent

EU EINECS/ELINCS List

231-545-4
418-260-2

Starch, pregelatinized

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

Australia (AICS):

REACH - Annex IV - Exemptions from the

Present

Present

obligations of Register:

EU EINECS/ELINCS List 232-679-6

# 16. OTHER INFORMATION

### Text of R phrases mentioned in Section 3

R22 - Harmful if swallowed.

R41 - Risk of serious damage to eyes.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

**Reasons for Revision:** Updated Section 1 - Identification of the Substance/Preparation and the Company/Undertaking.

Prepared by: 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** 

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