according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothia-

zide Formulation

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub- : Pharmaceutical

stance/Mixture

1.3 Details of the supplier of the safety data sheet

Company : Organon & Co.

30 Hudson Street, 33nd floor

07302 Jersey City, New Jersey, U.S.A

Telephone : 551-430-6000

E-mail address of person

responsible for the SDS

EHSSTEWARD@organon.com

### 1.4 Emergency telephone number

215-631-6999

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation. Reproductive toxicity, Category 1A H360D: May damage the unborn child.

Specific target organ toxicity - repeated H373: May cause damage to organs through pro-

exposure, Category 2 longed or repeated exposure.

Long-term (chronic) aquatic hazard, Cat-H412: Harmful to aquatic life with long lasting ef-

egory 3 fects.

### 2.2 Label elements

### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H319 Causes serious eye irritation.

H360D May damage the unborn child.

H373 May cause damage to organs through prolonged or

repeated exposure.

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

#### Prevention:

P201 Obtain special instructions before use.

P260 Do not breathe dust.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

### Response:

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

attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Hazardous components which must be listed on the label:

Olmesartan

Hydrochlorothiazide

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

May form explosible dust-air mixture if dispersed.

Contact with dust can cause mechanical irritation or drying of the skin.

### **SECTION 3: Composition/information on ingredients**

### 3.2 Mixtures

### Components

Chemical name	CAS-No. EC-No.	Classification	Concentration (% w/w)
	Index-No.		( /o w/w)
	Registration number		
Olmesartan	144689-63-4	Acute Tox. 4; H302	>= 10 - < 20
		Eye Irrit. 2; H319	
		Repr. 1A; H360D	
Hydrochlorothiazide	58-93-5	STOT RE 1; H372	>= 1 - < 10
	200-403-3	(Kidney, Parathy-	
		roid gland)	
Amlodipine Besylate	652969-01-2	Acute Tox. 4; H302	>= 2,5 - < 10

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Eye Irrit. 2; H319 Aquatic Chronic 2; H411

For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

If inhaled : If inhaled, remove to fresh air.

Get medical attention.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : In case of contact, immediately flush eyes with plenty of water

for at least 15 minutes.

If easy to do, remove contact lens, if worn.

Get medical attention.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

### 4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes serious eye irritation.

May damage the unborn child.

May cause damage to organs through prolonged or repeated

exposure.

Contact with dust can cause mechanical irritation or drying of

the skin.

### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media Water spray

> Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

High volume water jet

### 5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a

potential dust explosion hazard.

Do not use a solid water stream as it may scatter and spread

fire.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod- :

ucts

Carbon oxides

Nitrogen oxides (NOx) Chlorine compounds Sulphur oxides

### 5.3 Advice for firefighters

Special protective equipment:

for firefighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

Specific extinguishing meth-

ods

Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO

Evacuate area.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Personal precautions

Follow safe handling advice (see section 7) and personal pro-

tective equipment recommendations (see section 8).

### 6.2 Environmental precautions

**Environmental precautions** Avoid release to the environment.

> Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up or vacuum up spillage and collect in suitable con-

tainer for disposal.

Avoid dispersal of dust in the air (i.e., clearing dust surfaces

with compressed air).

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-

mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

### 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Technical measures : Static electricity may accumulate and ignite suspended dust

causing an explosion.

Provide adequate precautions, such as electrical grounding

and bonding, or inert atmospheres.

Local/Total ventilation : If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not breathe dust. Do not swallow. Do not get in eyes.

Wash skin thoroughly after handling.

Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure as-

sessment

Keep container tightly closed.

Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Do not eat, drink or smoke when using this product.

Take care to prevent spills, waste and minimize release to the

environment.

Hygiene measures : If exposure to chemical is likely during typical use, provide eye

flushing systems and safety showers close to the working place. When using do not eat, drink or smoke. Wash contami-

nated clothing before re-use.

The effective operation of a facility should include review of engineering controls, proper personal protective equipment, appropriate degowning and decontamination procedures,

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

industrial hygiene monitoring, medical surveillance and the

use of administrative controls.

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

Keep in properly labelled containers. Store locked up. Keep tightly closed. Store in accordance with the particular national

regulations.

Advice on common storage : Do not store with the following product types:

Strong oxidizing agents
Organic peroxides

Explosives Gases

7.3 Specific end use(s)

Specific use(s) : No data available

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

### **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Olmesartan	144689-63- 4	TWA	30 μg/m3 (OEB 3)	Internal
		Wipe limit	300 μg/100 cm <sup>2</sup>	Internal
Hydrochlorothia- zide	58-93-5	TWA	100 μg/m3 (OEB 2)	Internal
Amlodipine Besylate	652969-01- 2	TWA	20 μg/m3 (OEB 3)	Internal
		Wipe limit	100 μg/100 cm <sup>2</sup>	Internal

### 8.2 Exposure controls

### **Engineering measures**

Use feasible engineering controls to minimize exposure to compound.

All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment.

### Personal protective equipment

Eye protection : Wear safety glasses with side shields or goggles.

If the work environment or activity involves dusty conditions,

mists or aerosols, wear the appropriate goggles.

Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or

aerosols.

Hand protection

Material : Chemical-resistant gloves

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Skin and body protection : Work uniform or laboratory coat.

Respiratory protection : If adequate local exhaust ventilation is not available or expo-

sure assessment demonstrates exposures outside the rec-

ommended guidelines, use respiratory protection.

Equipment should conform to NS EN 143

Filter type : Particulates type (P)

### **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Physical state : tablet

Colour : No data available
Odour : No data available
Odour Threshold : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flammability (solid, gas) : No data available

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature

Decomposition tempera-

No data available

ture

pH : No data available

Viscosity

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

: Not applicable

Vapour pressure : Not applicable

Relative density : No data available

Density : No data available

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Relative vapour density : Not applicable

Particle characteristics

Particle size : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Evaporation rate : Not applicable

Molecular weight : No data available

### **SECTION 10: Stability and reactivity**

### 10.1 Reactivity

Not classified as a reactivity hazard.

### 10.2 Chemical stability

Stable under normal conditions.

### 10.3 Possibility of hazardous reactions

Hazardous reactions : Dust can form an explosive mixture in air.

Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Avoid dust formation.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

### 10.6 Hazardous decomposition products

No hazardous decomposition products are known.

### **SECTION 11: Toxicological information**

### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of : Inhalation exposure Skin contact

Ingestion Eye contact

**Acute toxicity** 

Not classified based on available information.

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

**Components:** 

Olmesartan:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

LD50 (Mouse): > 2.000 mg/kg

LD50 (Dog): > 1.500 mg/kg

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

Hydrochlorothiazide:

Acute oral toxicity : LD50 (Rat): > 2.750 mg/kg

LD50 (Mouse): > 2.830 mg/kg

Acute toxicity (other routes of :

administration)

LD50 (Rat): 990 mg/kg

Application Route: Intravenous

LD50 (Mouse): 590 mg/kg Application Route: Intravenous

**Amlodipine Besylate:** 

Acute oral toxicity : LD50 (Rat): 393 mg/kg

Skin corrosion/irritation

Not classified based on available information.

**Components:** 

Olmesartan:

Remarks : No data available

Hydrochlorothiazide:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye irritation.

**Components:** 

Olmesartan:

Species : Rabbit Method : Draize Test

Result : Moderate eye irritation

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10.10.2020

 1.3
 09.04.2021
 4983488-00004
 Date of first issue: 30.09.2019

Hydrochlorothiazide:

Species : Rabbit

Result : Mild eye irritation

**Amlodipine Besylate:** 

Species : Rabbit

Result : Severe irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

**Components:** 

Olmesartan:

Exposure routes : Skin contact Remarks : No data available

Germ cell mutagenicity

Not classified based on available information.

**Components:** 

Olmesartan:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Mutagenicity (in vitro mammalian cytogenetic test)

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster lung cells

Result: positive

Test Type: Mouse Lymphoma

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse

Cell type: Bone marrow Application Route: Oral

Result: negative

Germ cell mutagenicity- As-

sessment

: Weight of evidence does not support classification as a germ

cell mutagen.

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Hydrochlorothiazide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosomal aberration
Test system: Chinese hamster ovary cells

Result: negative

Test Type: sister chromatid exchange assay Test system: Chinese hamster ovary cells

Result: positive

Test Type: in vitro assay

Test system: mouse lymphoma cells

Result: positive

Genotoxicity in vivo : Test Type: Chromosomal aberration

Species: Chinese hamster Cell type: Bone marrow

Result: negative

Test Type: in vivo assay

Species: Mouse

Cell type: Bone marrow

Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

Amlodipine Besylate:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

### Carcinogenicity

Not classified based on available information.

#### **Components:**

### Olmesartan:

Species : Rat
Application Route : Oral
Exposure time : 2 Years
Result : negative

Species : Mouse
Application Route : Oral
Exposure time : 6 Months
Result : negative

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Hydrochlorothiazide:

Species : Mouse, female

Application Route : Oral
Exposure time : 2 Years
Result : negative

Species : Mouse, male

Application Route : Oral
Exposure time : 2 Years
Result : equivocal

Species : Rat, male and female

Application Route : Oral
Exposure time : 2 Years
Result : negative

**Amlodipine Besylate:** 

Species : Mouse
Application Route : Oral
Exposure time : 2 Years
Result : negative

Species: RatApplication Route: OralExposure time: 2 YearsResult: negative

Reproductive toxicity

May damage the unborn child.

**Components:** 

Olmesartan:

Effects on fertility : Test Type: Fertility

Species: Rat

**Application Route: Oral** 

Fertility: NOAEL: 1.000 mg/kg body weight

Result: No effects on fertility

Effects on foetal develop-

ment

Test Type: Development

Species: Rat

Application Route: Oral

Dose: 1000 milligram per kilogram Result: No teratogenic effects

Test Type: Development

Species: Rabbit Application Route: Oral Dose: 1 milligram per kilogram Result: No teratogenic effects

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: LOAEL: >= 1,6 mg/kg body weight Symptoms: Malformations were observed., Reduced body

weight

Result: Effects on postnatal development

Reproductive toxicity - As-

sessment

Positive evidence of adverse effects on development from

human epidemiological studies.

Hydrochlorothiazide:

Effects on fertility : Test Type: Fertility

Species: Rat, male and female Application Route: oral (feed)

Fertility: NOAEL: 4 mg/kg body weight

Result: Effects on fertility

Test Type: Fertility

Species: Mouse, male and female Application Route: oral (feed)

Fertility: NOAEL: 100 mg/kg body weight

Result: Effects on fertility

Effects on foetal develop-

ment

Test Type: Development

Species: Mouse

**Application Route: Oral** 

Developmental Toxicity: NOAEL: 3.000 mg/kg body weight

Result: No teratogenic effects

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: NOAEL: 1.000 mg/kg body weight

Result: No teratogenic effects

**Amlodipine Besylate:** 

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Rat

Application Route: Ingestion

Fertility: NOAEL: 10 mg/kg body weight

Result: No effects on fertility

Test Type: Fertility/early embryonic development

Species: Rabbit

Application Route: Ingestion

Fertility: NOAEL: 25 mg/kg body weight

Result: No effects on fertility

Effects on foetal develop- : Test Type: Embryo-foetal development

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 10.10.2020

 1.3
 09.04.2021
 4983488-00004
 Date of first issue: 30.09.2019

ment Species: Rat

Application Route: Ingestion

Developmental Toxicity: LOAEL: 10 mg/kg body weight

Result: Effects on foetal development

Test Type: Embryo-foetal development

Species: Rabbit

**Application Route: Ingestion** 

Developmental Toxicity: NOAEL: 10 mg/kg body weight

Result: No effects on foetal development

Test Type: Embryo-foetal development

Species: Mouse

Application Route: Ingestion

Developmental Toxicity: LOAEL: 1,6 mg/kg body weight

Result: Effects on foetal development Remarks: Maternal toxicity observed.

### STOT - single exposure

Not classified based on available information.

### STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

### **Components:**

### Hydrochlorothiazide:

Target Organs : Kidney, Parathyroid gland

Assessment : Causes damage to organs through prolonged or repeated

exposure.

#### Repeated dose toxicity

### **Components:**

# Olmesartan:

Species : Rat

NOAEL : 2.000 mg/kg

Application Route : Oral Exposure time : 24 Months

Remarks : No significant adverse effects were reported

### Hydrochlorothiazide:

Species : Rat, male and female

LOAEL : 10 mg/kg
Application Route : Oral
Exposure time : 2 yr

Target Organs : Kidney, Parathyroid gland

Species : Mouse, male and female

NOAEL : 300 - 550 mg/kg

Application Route : Oral

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Exposure time : 2 yr

Remarks : No significant adverse effects were reported

Species : Dog

: 50 - 200 mg/kg

Application Route : Oral Exposure time : 9 Months

Target Organs : Parathyroid gland

**Amlodipine Besylate:** 

Species : Rat

NOAEL : 15 mg/kg

Application Route : Oral

Exposure time : 90 d

Remarks : No significant adverse effects were reported

### **Aspiration toxicity**

Not classified based on available information.

### **Components:**

### Hydrochlorothiazide:

No aspiration toxicity classification

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

### **Experience with human exposure**

#### **Components:**

#### Olmesartan:

Eye contact : Symptoms: Eye irritation Ingestion : Symptoms: hypotension

Remarks: May cause harm to the unborn child.

Based on Human Evidence

Hydrochlorothiazide:

Eye contact : Symptoms: Eye irritation

Ingestion : Symptoms: Dizziness, Headache, Fatigue, Nausea, Ab-

dominal pain, hypotension, dry mouth, electrolyte imbalance,

eye pain

### **Amlodipine Besylate:**

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Eye contact : Symptoms: Severe irritation

Ingestion : Symptoms: Nausea, Abdominal pain, Fatigue, Headache,

Oedema, Palpitation

### **SECTION 12: Ecological information**

### 12.1 Toxicity

### Components:

Hydrochlorothiazide:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 500 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 500 mg/l

Exposure time: 48 h

**Amlodipine Besylate:** 

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 2,7 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3,2 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

IC50 (Pseudokirchneriella subcapitata (green algae)): 5,6 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

### 12.2 Persistence and degradability

### **Components:**

Hydrochlorothiazide:

Stability in water : Hydrolysis: 46,2 %(96 h)

### 12.3 Bioaccumulative potential

### **Components:**

**Amlodipine Besylate:** 

Partition coefficient: n-

octanol/water

log Pow: 3

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

0.1% or higher.

#### 12.6 Other adverse effects

### **Product:**

Endocrine disrupting poten-

tial

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.19% or higher.

levels of 0.1% or higher.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Dispose of in accordance with local regulations.

According to the European Waste Catalogue, Waste Codes

are not product specific, but application specific.

Waste codes should be assigned by the user, preferably in

discussion with the waste disposal authorities.

Contaminated packaging : Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

### **SECTION 14: Transport information**

### 14.1 UN number or ID number

Not regulated as a dangerous good

### 14.2 UN proper shipping name

Not regulated as a dangerous good

### 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

Not regulated as a dangerous good

### 14.6 Special precautions for user

Not applicable

### 14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

### **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

according to Regulation (EC) No. 1907/2006



Not applicable

Not applicable

Not applicable

Not applicable

# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

REACH - Restrictions on the manufacture, placing on

the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

REACH - Candidate List of Substances of Very High : Not applicable

Concern for Authorisation (Article 59).

REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Regulation (EC) No 649/2012 of the European Parlia:

ment and the Council concerning the export and import

of dangerous chemicals

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

### Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

### The components of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

### **SECTION 16: Other information**

Other information : Items where changes have been made to the previous version

are highlighted in the body of this document by two vertical

lines.

**Full text of H-Statements** 

H302 : Harmful if swallowed.

H319 : Causes serious eye irritation. H360D : May damage the unborn child.

H372 : Causes damage to organs through prolonged or repeated

exposure.

H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Chronic : Long-term (chronic) aquatic hazard

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

Eye Irrit. : Eye irritation

Repr. : Reproductive toxicity

STOT RE : Specific target organ toxicity - repeated exposure

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP -Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk: IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL -International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TSCA -Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

### **Further information**

Eye Irrit. 2

Repr. 1A

Sources of key data used to compile the Safety Data Sheet

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

#### Classification of the mixture:

# Calculation method Calculation method Calculation method

Classification procedure:

STOT RE 2 Aquatic Chronic 3 H373 H412

H319

H360D

Calculation method

according to Regulation (EC) No. 1907/2006



# Olmesartan / Amlodipine Besylate (3.5%) / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 10.10.2020 1.3 09.04.2021 4983488-00004 Date of first issue: 30.09.2019

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

NO / EN