

Losartan / Amlodipine Besylate Formulation

Version **Revision Date:** SDS Number: Date of last issue: 23.03.2020 10.10.2020 49929-00016 Date of first issue: 26.01.2015 5.1

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Losartan / Amlodipine Besylate Formulation

Manufacturer or supplier's details

: Organon & Co. Company

Address Rua Treze de Maio, 1161

Campinas, São Paulo, Brazil B-2220

Telephone 551-430-6000

215-631-6999 Emergency telephone

E-mail address EHSSTEWARD@organon.com

Recommended use of the chemical and restrictions on use

Recommended use Pharmaceutical

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification in accordance with ABNT NBR 14725 Standard

Serious eye damage Category 1

Skin sensitization Category 1

Reproductive toxicity Category 1B

Effects on or via lactation

repeated exposure (Oral)

Specific target organ toxicity - : Category 2 (Blood, Cardio-vascular system, Stomach, Kidney)

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms







Signal Word Danger

Hazard Statements H317 May cause an allergic skin reaction.

H318 Causes serious eye damage. H360D May damage the unborn child.

H362 May cause harm to breast-fed children.

H373 May cause damage to organs (Blood, Cardio-vascular system, Stomach, Kidney) through prolonged or repeated

exposure if swallowed.

Precautionary Statements Prevention:



Losartan / Amlodipine Besylate Formulation

Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

P201 Obtain special instructions before use.

P260 Do not breathe dust.

P263 Avoid contact during pregnancy/ while nursing.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/ doctor.

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

Other hazards which do not result in classification

Contact with dust can cause mechanical irritation or drying of the skin. May form explosive dust-air mixture during processing, handling or other means.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Cellulose	9004-34-6		>= 50 -< 70
Losartan	124750-99-8	Acute toxicity (Oral), Category 4 Serious eye damage, Category 1 Skin sensitization, Category 1 Reproductive toxicity, Category 1B Effects on or via lactation, Specific target organ toxicity - repeated exposure (Oral) (Blood, Cardiovascular system, Stomach, Kidney), Category 2	>= 10 -< 20
Amlodipine Besylate	652969-01-2	Acute toxicity (Oral), Category 4 Eye irritation, Category 2A Short-term (acute) aquatic hazard, Category 2 Long-term (chronic) aquatic hazard, Category 2	>= 1 -< 2,5
Titanium dioxide	13463-67-7	Carcinogenicity (Inha-	>= 0,1 -< 1



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

lation), Category 2

SECTION 4. FIRST AID MEASURES

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

advice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

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 immediately.

If swallowed : If swallowed, DO NOT induce vomiting.

Get medical attention.

Rinse mouth thoroughly with water.

May cause an allergic skin reaction.

Causes serious eye damage.

May damage the unborn child.

May cause harm to breast-fed children.

May cause damage to organs through prolonged or repeated

exposure if swallowed.

Contact with dust can cause mechanical irritation or drying of

the skin.

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).

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Most important symptoms

delayed

and effects, both acute and

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

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.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

: Carbon oxides

Chlorine compounds Nitrogen oxides (NOx)



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Metal oxides

Specific extinguishing methods

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.

Special protective equipment

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

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

for fire-fighters

Use personal protective equipment.

Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

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.

Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable

container 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

determine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

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 : Avoid contact during pregnancy and while nursing.

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

assessment



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Keep container tightly closed.

Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition.

Take precautionary measures against static discharges. 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.

Contaminated work clothing should not be allowed out of the

workplace.

Wash contaminated clothing before re-use.

Conditions for safe storage : Keep in properly labeled containers.

Store locked up. Keep tightly closed.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents Organic peroxides

Explosives Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of	Control parameters / Permissible concentration	Basis
		exposure)	concentration	
Cellulose	9004-34-6	TWA	10 mg/m ³	ACGIH
Losartan	124750-99-8	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 ²	Internal
Titanium dioxide	13463-67-7	TWA	10 mg/m³ (Titanium dioxide)	ACGIH

Engineering measures : Minimize workplace exposure concentrations.

Apply measures to prevent dust explosions.

Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). If sufficient ventilation is unavailable, use with local exhaust

ventilation.

Personal protective equipment

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

exposure assessment demonstrates exposures outside the

recommended guidelines, use respiratory protection.

Filter type : Particulates type



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Hand protection

Material : Chemical-resistant gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before

breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:

Chemical resistant goggles must be worn.

If splashes are likely to occur, wear:

Face-shield

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : powder

Color : No data available

Odor : No data available

Odor Threshold : No data available

pH : No data available

Melting point/freezing point : No data available

Initial boiling point and boiling

range

No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : May form explosive dust-air mixture during processing,

handling or other means.

Flammability (liquids) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapor pressure : No data available



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Relative vapor density : No data available

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : No data available

Explosive properties : Not explosive

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

Molecular weight : No data available

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard. Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

May form explosive dust-air mixture during processing,

handling or other means.

Can react with strong oxidizing agents.

Conditions to avoid : Heat, flames and sparks.

Avoid dust formation.

Oxidizing agents

Incompatible materials

Hazardous decomposition :

products

No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of:

exposure

: Inhalation Skin contact

> Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5.000 mg/kg

Method: Expert judgment



Losartan / Amlodipine Besylate Formulation

♣ ORGANON

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.03.2020

 5.1
 10.10.2020
 49929-00016
 Date of first issue: 26.01.2015

Components:

Cellulose:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,8 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Losartan:

Acute oral toxicity : LD50 (Mouse): 1.257 - 1.590 mg/kg

LDLo (Rat): 200 mg/kg

LDLo (Mouse): 400 mg/kg

Amlodipine Besylate:

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

Titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6,82 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Skin corrosion/irritation

Not classified based on available information.

Components:

Losartan:

Species : Rabbit

Result : Mild skin irritation

Titanium dioxide:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Causes serious eye damage.

Components:

Losartan:

Species : Rabbit

Result : Severe irritation



Losartan / Amlodipine Besylate Formulation

♣ ORGANON

Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Amlodipine Besylate:

Species : Rabbit

Result : Severe irritation

Titanium dioxide:

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitization

Skin sensitization

May cause an allergic skin reaction.

Respiratory sensitization

Not classified based on available information.

Components:

Losartan:

Test Type : Maximization Test
Routes of exposure : Skin contact
Species : Guinea pig

Assessment : Probability or evidence of skin sensitization in humans

Result : positive

Titanium dioxide:

Test Type : Local lymph node assay (LLNA)

Routes of exposure : Skin contact
Species : Mouse
Result : negative

Germ cell mutagenicity

Not classified based on available information.

Components:

Cellulose:

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

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion

Result: negative

Losartan:

Genotoxicity in vitro : Test Type: in vitro test



Losartan / Amlodipine Besylate Formulation

Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Result: negative

Test Type: In vitro mammalian cell gene mutation test

Test system: Chinese hamster ovary cells

Result: negative

Test Type: Alkaline elution assay

Result: negative

Test Type: Chromosomal aberration

Result: negative

Genotoxicity in vivo : Test Type: Chromosomal aberration

Result: negative

Amlodipine Besylate:

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

Result: negative

Test Type: Chromosome aberration test in vitro

Result: negative

Titanium dioxide:

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

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse Result: negative

Carcinogenicity

Not classified based on available information.

Components:

Cellulose:

Species : Rat
Application Route : Ingestion
Exposure time : 72 weeks
Result : negative

Losartan:

Species : Mouse
Application Route : Oral
Exposure time : 92 weeks

Dose : 200 mg/kg body weight

Result : negative

Species : Rat
Application Route : Oral
Exposure time : 105 weeks

Dose : 270 mg/kg body weight



Losartan / Amlodipine Besylate Formulation

♣ ORGANON

Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Result : negative

Amlodipine Besylate:

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

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

Titanium dioxide:

Species : Rat

Application Route : inhalation (dust/mist/fume)

Exposure time : 2 Years

Method : OECD Test Guideline 453

Result : positive

Remarks : The mechanism or mode of action may not be relevant in hu-

mans.

Carcinogenicity - Assess-

ment

Limited evidence of carcinogenicity in inhalation studies with

animals.

Reproductive toxicity

May damage the unborn child.

May cause harm to breast-fed children.

Components:

Cellulose:

Effects on fertility : Test Type: One-generation reproduction toxicity study

Species: Rat

Application Route: Ingestion

Result: negative

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

Species: Rat

Application Route: Ingestion

Result: negative

Losartan:

Effects on fertility : Test Type: Fertility

Species: Rat, female Application Route: Oral

Fertility: LOAEL: 200 mg/kg body weight Result: female reproductive effects Remarks: Maternal toxicity observed.

Effects on fetal development : Test Type: Development

Species: Rabbit



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Application Route: Oral

General Toxicity Maternal: NOAEL: 10 mg/kg body weight Developmental Toxicity: NOAEL F1: 20 mg/kg body weight Result: Embryotoxic effects and adverse effects on the offspring were detected only at high maternally toxic doses,

No teratogenic effects.

Test Type: Development

Species: Rat

Application Route: Oral

Developmental Toxicity: LOAEL: 10 mg/kg body weight

Result: Fetotoxicity., No teratogenic effects.

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on development, based on

animal experiments.

Studies indicating a hazard to babies during the lactation

period

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 fetal development : Test Type: Embryo-fetal development

Species: Rat

Application Route: Ingestion

Developmental Toxicity: LOAEL: 10 mg/kg body weight

Result: Effects on fetal development.

Test Type: Embryo-fetal development

Species: Rabbit

Application Route: Ingestion

Developmental Toxicity: NOAEL: 10 mg/kg body weight

Result: No effects on fetal development.

Test Type: Embryo-fetal development

Species: Mouse

Application Route: Ingestion

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

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

STOT-single exposure

Not classified based on available information.



Losartan / Amlodipine Besylate Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.03.2020

 5.1
 10.10.2020
 49929-00016
 Date of first issue: 26.01.2015

STOT-repeated exposure

May cause damage to organs (Blood, Cardio-vascular system, Stomach, Kidney) through prolonged or repeated exposure if swallowed.

Components:

Losartan:

Routes of exposure : Ingestion

Target Organs : Blood, Cardio-vascular system, Stomach, Kidney

Assessment : May cause damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

Cellulose:

Species : Rat

NOAEL : >= 9.000 mg/kg

Application Route : Ingestion Exposure time : 90 Days

Losartan:

Species : Rat
LOAEL : 15 mg/kg
Application Route : Oral
Exposure time : 309 d
Number of exposures : daily

Target Organs : Blood, Kidney, Cardio-vascular system, Stomach

Species : Dog NOAEL : 5 mg/kg Application Route : Oral Exposure time : 1 Months

Symptoms : Salivation, Vomiting

Species : Dog LOAEL : 25 mg/kg Application Route : Oral Exposure time : 53 Weeks Number of exposures : daily

Symptoms : Salivation, Vomiting

Amlodipine Besylate:

Species : Rat
NOAEL : 15 mg/kg
Application Route : Oral
Exposure time : 90 d

Remarks : No significant adverse effects were reported

Titanium dioxide:

Species : Rat

NOAEL : 24.000 mg/kg



Losartan / Amlodipine Besylate Formulation



Version **Revision Date:** SDS Number: Date of last issue: 23.03.2020 10.10.2020 49929-00016 Date of first issue: 26.01.2015 5.1

Application Route Ingestion Exposure time 28 Days

Species Rat NOAEL 10 mg/m³

Application Route inhalation (dust/mist/fume)

Exposure time 2 y

Aspiration toxicity

Not classified based on available information.

Components:

Losartan:

No aspiration toxicity classification

Experience with human exposure

Components:

Losartan:

Eve contact Symptoms: Eye irritation

Ingestion Symptoms: hypotension, tachycardia

Amlodipine Besylate:

Eve contact Symptoms: Severe irritation

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

Edema, Palpitation

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Cellulose:

Toxicity to fish LC50 (Oryzias latipes (Japanese medaka)): > 100 mg/l

Exposure time: 48 h

Remarks: Based on data from similar materials

Losartan:

Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): > 929 mg/l

Exposure time: 96 h Method: FDA 4.11

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 331 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

NOEC (Microcystis aeruginosa (blue-green algae)): 949 mg/l

Exposure time: 10 d

Method: FDA 4.01

NOEC (Selenastrum capricornutum (green algae)): 143 mg/l



Losartan / Amlodipine Besylate Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.03.2020

 5.1
 10.10.2020
 49929-00016
 Date of first issue: 26.01.2015

Exposure time: 10 d Method: FDA 4.01

Toxicity to fish (Chronic tox-

icity)

NOEC (Pimephales promelas (fathead minnow)): 10 mg/l

Exposure time: 32 d

Method: OECD Test Guideline 210

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): 100 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

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

Titanium dioxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): > 10.000 mg/l

Exposure time: 72 h

Toxicity to microorganisms : EC50: > 1.000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Persistence and degradability

Components:

Cellulose:

Biodegradability : Result: Readily biodegradable.

Losartan:

Stability in water : Hydrolysis: < 10 %(5 d)

Bioaccumulative potential

Components:

Losartan:



Losartan / Amlodipine Besylate Formulation



Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

Partition coefficient: n-

octanol/water

: log Pow: 1,2

Amlodipine Besylate:

Partition coefficient: n-

octanol/water

: log Pow: 3

Mobility in soil

No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues Contaminated packaging Dispose of in accordance with local regulations.

Empty containers should be taken to an approved waste

handling site for recycling or disposal.

If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

ANTT

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

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

National List of Carcinogenic Agents for Humans - (LINACH)

Group 2B: Possibly carcinogenic to humans

Titanium dioxide 13463-67-7

Brazil. List of chemicals controlled by the Federal

Police

Not applicable



Losartan / Amlodipine Besylate Formulation

Version Revision Date: SDS Number: Date of last issue: 23.03.2020 5.1 10.10.2020 49929-00016 Date of first issue: 26.01.2015

International Regulations

The ingredients of this product are reported in the following inventories:

AICS : not determined

DSL : not determined

IECSC : not determined

SECTION 16. OTHER INFORMATION

Further information

Sources of key data used to compile the Material 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/

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

ACGIH / TWA : 8-hour, time-weighted average

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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; WHMIS - Workplace Hazardous Materials Information System



Losartan / Amlodipine Besylate Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 23.03.2020

 5.1
 10.10.2020
 49929-00016
 Date of first issue: 26.01.2015

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.

BR / Z8