According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 06.04.2024 9372562-00007 Date of first issue: 27.08.2021 4.2

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

1.1 Product identifier

Trade name Enalapril / Hydrochlorothiazide Formulation

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

Use of the Sub-

stance/Mixture

: Pharmaceutical

Recommended restrictions

on use

Not applicable

1.3 Details of the supplier of the safety data sheet

Company Organon & Co.

Shotton Lane

NE23 3JU Cramlington NU - Great Britain

Telephone +44 1 670 59 32 05

E-mail address of person

responsible for the SDS

: EHSSTEWARD@organon.com

1.4 Emergency telephone number

+1-215-631-6999

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Reproductive toxicity, Category 1A

Specific target organ toxicity - repeated

exposure, Category 1

H360D: May damage the unborn child.

H372: Causes damage to organs through pro-

longed or repeated exposure.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms



Signal word

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 4.2 06.04.2024 9372562-00007 Date of first issue: 27.08.2021

Hazard statements : H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or

repeated exposure.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this prod-

uct.

P280 Wear protective gloves/ protective clothing/ eye

protection/ face protection.

Response:

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

attention.

Hazardous components which must be listed on the label:

Hydrochlorothiazide

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate

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.

Dust contact with the eyes can lead to mechanical irritation.

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

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)			
Hydrochlorothiazide	58-93-5 200-403-3	STOT RE 1; H372 (Kidney, Parathy- roid gland)	>= 10 - < 20			
(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate	76095-16-4 278-375-7	Acute Tox. 4; H302 Eye Irrit. 2; H319 Repr. 1A; H360D STOT RE 1; H372 (Kidney, Cardio- vascular system)	>= 1 - < 10			
Substances with a workplace exposure limit :						
Starch	9005-25-8 232-679-6		>= 10 - < 20			

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

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 : If in eyes, rinse well with water.

Get medical attention if irritation develops and persists.

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 : May damage the unborn child.

Causes damage to organs through prolonged or repeated

exposure.

Contact with dust can cause mechanical irritation or drying of

the skin

Dust contact with the eyes can lead to mechanical irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

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.

Exposure to combustion products may be a hazard to health.

Hazardous combustion prod: :

ucts

Carbon oxides

Nitrogen oxides (NOx) Chlorine compounds Sulphur oxides Metal 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

Personal precautions : Use personal protective equipment.

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.

If spillage enters rivers or watercourses, inform the Environment Agency (emergency telephone number 0800 807060).

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).

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

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.

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.

Avoid contact with 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.

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. 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, 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.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 4.2 06.04.2024 9372562-00007 Date of first issue: 27.08.2021

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

Strong oxidizing agents

Self-reactive substances and mixtures

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

dust of any kind 10 mg/m3

Value type (Form of exposure): TWA (Inhalable)

Basis: GB EH40

4 mg/m3

Value type (Form of exposure): TWA (Respirable fraction)

Basis: GB EH40

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Hydrochlorothia- zide	58-93-5	TWA	100 μg/m3 (OEB 2)	Internal
Starch	9005-25-8	TWA (inhalable dust)	10 mg/m3	GB EH40
		TWA (Respirable dust)	4 mg/m3	GB EH40
(S)-1-[N-[1- (Ethoxycarbonyl)- 3-phenylpropyl]-L- alanyl]-L-proline maleate	76095-16-4	TWA	50 μg/m3 (OEB 3)	Internal
		Wipe limit	500 μg/100 cm ²	Internal

8.2 Exposure controls

Engineering measures

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

Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices).

Minimize open handling.

Personal protective equipment

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Eye/face 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

Remarks : Consider double gloving.

Skin and body protection : Work uniform or laboratory coat.

Additional body garments should be used based upon the task being performed (e.g., sleevelets, apron, gauntlets, disposable

suits) to avoid exposed skin surfaces.

Use appropriate degowning techniques to remove potentially

contaminated clothing.

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 BS EN 143

Filter type : Particulates type (P)

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : powder

Colour : No data available
Odour : No data available
Odour 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 : Not applicable

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

dling or other means.

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower

flammability limit

No data available

Vapour pressure : No data available

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 4.2 9372562-00007 Date of first issue: 27.08.2021

Relative vapour density : Not applicable

Relative density : No data available

Density : No data available

Solubility(ies)

Water solubility : No data available Partition coefficient: n- : Not applicable

octanol/water

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, kinematic : Not applicable

Explosive properties : Not explosive

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

9.2 Other information

Flammability (liquids) : No data available

Particle size : 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 : May form explosive dust-air mixture during processing, han-

dling or other means.

Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Avoid dust formation.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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: > 2,000 mg/kg

Method: Calculation method

Components:

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

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Acute oral toxicity : LD50 (Rat): 2,000 - 3,500 mg/kg

LDLo (Rat): 1,775 mg/kg

LD50 (Mouse): 2,000 - 3,500 mg/kg

LDLo (Mouse): 1,000 mg/kg

Acute toxicity (other routes of :

administration)

LD50 (Rat): 850 mg/kg

Application Route: Intravenous

LD50 (Mouse): 750 mg/kg Application Route: Intravenous

LD50 (Dog): > 100 mg/kg

LDLo (Dog): 200 mg/kg

Starch:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Skin corrosion/irritation

Not classified based on available information.

Components:

Hydrochlorothiazide:

Species : Rabbit

Result : No skin irritation

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Species : Rabbit

Result : No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Components:

Hydrochlorothiazide:

Species : Rabbit

Result : Mild eye irritation

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Species : Rabbit

Result : Severe irritation

Starch:

Species : Rabbit

Result : No eye irritation

Respiratory or skin sensitisation

Skin sensitisation

Not classified based on available information.

Respiratory sensitisation

Not classified based on available information.

Components:

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Test Type : Maximisation Test Exposure routes : Skin contact Species : Guinea pig

Result : Not a skin sensitizer.

Starch:

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Test Type : Maximisation Test
Exposure routes : Skin contact
Species : Guinea pig
Result : negative

Germ cell mutagenicity

Not classified based on available information.

Components:

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.

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

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

Result: negative

Test Type: In vitro sister chromatid exchange assay in mam-

malian cells Result: negative

Test Type: Alkaline elution assay

Result: negative

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

cytogenetic assay)

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Species: Mouse

Application Route: Ingestion

Result: negative

Test Type: Mutagenicity (in vivo mammalian bone-marrow

cytogenetic test, chromosomal analysis)

Species: Mouse

Application Route: Ingestion

Result: negative

Starch:

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

Result: negative

Carcinogenicity

Not classified based on available information.

Components:

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

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Species : Rat
Application Route : Ingestion
Exposure time : 106 weeks

NOAEL : 90 mg/kg body weight

Result : negative

Species : Mouse
Application Route : Ingestion
Exposure time : 94 weeks

NOAEL : 90 - 180 mg/kg body weight

Result : negative

Reproductive toxicity

May damage the unborn child.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Components:

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

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Effects on fertility : Test Type: Fertility

Species: Rat, male and female Application Route: Ingestion

Fertility: NOAEL: 90 mg/kg body weight

Result: No effects on fertility

Effects on foetal develop-

ment

Species: Rat

Application Route: Ingestion

Developmental Toxicity: NOAEL: 200 mg/kg body weight

Result: No effects on foetal development

Species: Rat

Application Route: Ingestion

Developmental Toxicity: LOAEL: 1,200 mg/kg body weight

Result: Fetotoxicity

Species: Rat

Application Route: Ingestion

Developmental Toxicity: LOAEL: 30 mg/kg body weight Result: Effects on postnatal development, Effects on newborn,

No teratogenic effects

Species: Rabbit

Application Route: Ingestion

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

General Toxicity Maternal: LOAEL: 1 mg/kg body weight Developmental Toxicity: LOAEL: 1 mg/kg body weight Result: Fetotoxicity, Maternal toxicity observed., No teratogen-

ic effects

Reproductive toxicity - As-

sessment

Positive evidence of adverse effects on development from

human epidemiological studies.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Causes 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.

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Target Organs : Kidney, Cardio-vascular system

Assessment : Causes damage to organs through prolonged or repeated

exposure.

Repeated dose toxicity

Components:

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 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

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Species : Dog

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 4.2 06.04.2024 9372562-00007 Date of first issue: 27.08.2021

NOAEL : 15 mg/kg
LOAEL : 30 mg/kg
Application Route : Ingestion
Exposure time : 1 yr
Target Organs : Kidney

Species : Rat

NOAEL : 90 mg/kg

Application Route : Oral

Exposure time : 1 yr

Remarks : No significant adverse effects were reported

Species : Monkey
NOAEL : 30 mg/kg
Application Route : Oral
Exposure time : 1 Months

Remarks : No significant adverse effects were reported

Starch:

Species : Rat

NOAEL : >= 2,000 mg/kg
Application Route : Skin contact
Exposure time : 28 Days

Method : OECD Test Guideline 410

Aspiration toxicity

Not classified based on available information.

Components:

Hydrochlorothiazide:

No aspiration toxicity classification

Experience with human exposure

Components:

Hydrochlorothiazide:

Eye contact : Symptoms: Eye irritation

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

dominal pain, hypotension, dry mouth, electrolyte imbalance,

eye pain

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

Ingestion : Target Organs: Cardio-vascular system

Symptoms: hypotension, Cough, Dizziness, Headache,

Blurred vision, Fatigue, Oedema, Nausea, hyperkalemia, faint-

ing, Weakness, skin rash

Remarks: May cause harm to the unborn child.

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 06.04.2024 9372562-00007 Date of first issue: 27.08.2021 4.2

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrochlorothiazide:

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

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 500 mg/l

Exposure time: 48 h

(S)-1-[N-[1-(Ethoxycarbonyl)-3-phenylpropyl]-L-alanyl]-L-proline maleate:

LC50 (Pimephales promelas (fathead minnow)): > 1,000 mg/l Toxicity to fish

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 346 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to microorganisms EC50 (Natural microorganism): > 1,000 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

12.2 Persistence and degradability

Components:

Hydrochlorothiazide:

Stability in water Hydrolysis: 46.2 %(96 h)

12.3 Bioaccumulative potential

No data available

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

0.1% or higher.

12.6 Other adverse effects

Product:

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Endocrine disrupting poten-

tial

This substance/mixture does not contain components considered to have endocrine disrupting properties for environment

according to UK REACH Article 57(f).

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.

Do not dispose of waste into sewer.

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

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

Version Revision Date: SDS Number: Date of last issue: 30.09.2023 4.2 06.04.2024 9372562-00007 Date of first issue: 27.08.2021

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : 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 Transport in bulk according to Annex II of Marpol and the IBC Code

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Not applicable UK REACH Candidate list of substances of very high : Not applicable

concern (SVHC) for Authorisation

The Persistent Organic Pollutants Regulations (retained : Not applicable

Regulation (EU) 2019/1021 as amended for Great Brit-

ain)

Regulation (EC) No 1005/2009 on substances that de: Not applicable

plete the ozone layer

UK REACH List of substances subject to authorisation : Not applicable

(Annex XIV)

GB Export and import of hazardous chemicals - Prior : Not applicable

Informed Consent (PIC) Regulation

Control of Major Accident Hazards Regulations 2015 (COMAH)

Not applicable

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.

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

AICS : not determined

DSL : not determined

IECSC : not determined

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

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.

Full text of other abbreviations

Acute Tox. : Acute toxicity Eye Irrit. : Eye irritation

Repr. : Reproductive toxicity

STOT RE : Specific target organ toxicity - repeated exposure GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - 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

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758



Enalapril / Hydrochlorothiazide Formulation

 Version
 Revision Date:
 SDS Number:
 Date of last issue: 30.09.2023

 4.2
 06.04.2024
 9372562-00007
 Date of first issue: 27.08.2021

Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals 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

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: Classification procedure:

Repr. 1A H360D Calculation method STOT RE 1 H372 Calculation method

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.

GB / EN