

**Safety Data Sheet** 

according to Regulation (EC) No 1907/2006 (REACH) Classifications according to Regulation (EC) No 1272/2008. Printdate 27 Dec 2022

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

#### 1.1. Product name:

Irbesartan

## 1.1. Catalog No.:

680937

### 1.2. Relevant identified uses of the substance or mixture

Identified: Laboratory chemical uses: R&D

uses:

## 1.3. Uses advised against:

HPC Standards GmbH Am Wieseneck 7

04451 Cunnersdorf Deutschland

Tel. +49 34291 3372-36 Fax. +49 34291 3372-39 contact@hpc-standards.com

## 1.4. Emergency telephone number

HPC Standards Tel. +49 34291 3372-36 This number is only available during office hours.

### 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Flammable liquids (Category 2), H225
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Eye irritation (Category 2), H319
For the full text of the H-Statements mentioned in this Section, see Section 16.

F Highly flammable R11 Xn Harmful R20/21/22 Xi Irritant R36

# 2.2. Label elements

# 2.2.1. Pictogram







#### 2.2.2.

Signal word Danger Hazard statement(s)

Highly flammable liquid and vapour. Harmful if swallowed, in contact with skin or if inhaled. Causes serious eye irritation. Wear protective gloves and protective clothing. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Avoid breathing vapour. Do not eat, drink or smoke when using this product. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Dispose of contents and container in accordance with all local, regional, national and international regulations.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Synonyms : Methyl cyanide

AĆN

ACN
Formula: C2H3N
Molecular Weight: 41,05 g/mol
CAS-No.: 75-05-8
EC-No.: 200-835-2
Index-No.: 608-001-00-3
Registration number: 01-2119471307-38-XXXX

Hazardous ingredients
Component Classification Concentration

Acetonitrile CAS-No. EC-No. Index-No. Registration number

Registration number 75-05-8 200-835-2 608-001-00-3 01-2119471307-38-XXXX Flam. Liq. 2; Acute Tox. 4; Eye Irrit. 2; H225, H302 + H312 + H332, H319

<= 100 %

Hazardous ingredients Component Classification Concentration

Acetonitrile CAS-No. EC-No. Index-No. Registration number 75-05-8 200-835-2 200-835-2 608-001-00-3 01-2119471307-38-XXXX F, Xn, R11 - R20/21/22 - R36 <= 100 %

# 3.1.1. Formula

C25H28N6O



# 3.1.2. Molecular Weight (g/mol)

428.53

#### 3.1.3. CAS-No.

138402-11-6

## 4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in

4.3 Indication of any immediate medical attention and special treatment needed no data available

# 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

no data available

5.3 Advice for firefighters Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.



6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened mended carefully resealed and kept upright to prevent leakage.

Recommended storage temperature: 2 - 8 °C

7.3 Specific end uses no data available

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters
Derived No Effect Level (DNEL)
Application Area Workers
Exposure routes Inhalation

Health effect Acute local effects, Acute systemic effects

Health effect Acute local effects, Acute systemic effects
Value 68 mg/m3
Application Area Workers
Exposure routes Skin contact
Health effect Long-term systemic effects
Value 32,2mg/kg BW/d
Application Area Workers
Exposure routes Inhalation
Health effect Long-term local effects, Long-term systemic effects
Value 68 mg/m3
Application Area Workers
Exposure routes Inhalation

Exposure routes Inhalation

Health effect Long-term local effects, Long-term systemic effects

Value 68 mg/m3

Application Area Consumers

Exposure routes Inhalation

Health effect Acute local effects Value 220 mg/m3

**Application Area Consumers** 

Exposure routes Inhalation

Health effect Acute systemic effects Value 22 mg/m3 Application Area Consumers

Exposure routes Inhalation

Health effect Long-term systemic effects

Value 4,8 mg/m3



Predicted No Effect Concentration (PNEC)

Compartment Value Water 10 mg/l 2,41 mg/kg 1 mg/l Soil Marine water 10 mg/l Fresh water Fresh water sediment 7,53 mg/kg Onsite sewage treatment plant 32 mg/l

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands

before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN166(EU). Skin protection

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
The selected protective gloves have to satisfy the specifications of Regulation (EU)
2016/425 and the standard EN 374 derived from it.
If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Scenario.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective leaves and protective equipment must be selected according to the clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties a) Appearance Form: clear, liquid Colour: colourless

b) Odour ether-like
c) Odour Threshold no data available
d) pH no data available

e) Melting point/freezing

point Melting point/range: -48 °C f) Initial boiling point and

boiling range 81 - 82 °C

g) Flash point 2,0 °C - closed cup h) Evapouration rate 5,8

Flammability (solid, gas) no data available

j) Upper/lower flammability or

explosive limits
Upper explosion limit: 16 %(V)
Lower explosion limit: 3 %(V)
k) Vapour pressure 73,18 hPa at 15 °C
121,44 hPa at 25 °C
413,23 hPa at 55 °C

98,64 hPa at 20 °C

l) Vapour density 1,42 - (Air = 1.0) m) Relative density 0,786 g/mL at 25 °C



n) Water solubility completely soluble o) Partition coefficient: noctanol/ water log Pow: -0,54 at 25 °C p) Auto-ignition temperature 524,0 °C q) Decomposition témperature no data available r) Viscosity no data available

s) Explosive properties Not explosive
t) Oxidizing properties The substance or mixture is not classified as oxidizing.
9.2 Other safety information
Surface tension 29,0 mN/m at 20,0 °C Relative vapour density 1,42 - (Air = 1.0)

# 10. STABILITY AND REACTIVITY

10.1 Reactivity no data available 10.2 Chemical stability no data available 10.3 Possibility of hazardous reactions no data available 10.4 Conditions to avoid Heat, flames and sparks. Extremes of temperature and direct sunlight. 10.5 Incompatible materials acids, Bases, Oxidizing agents, Alkali metals 10.6 Hazardous decomposition products Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects Acute toxicity
LD50 Oral - rat - male - 1.320 - 6.690 mg/kg
LC50 Inhalation - mouse - 4 h - 3587 ppm
(OECD Test Guideline 403)
LC50 Inhalation - rat - 4 h - 26,8 mg/l
LD50 Dermal - rabbit - male and female - > 2.000 mg/kg
(OECD Test Guideline 402)
Skin corrosion/irritation
Skin - rabbit Skin - rabbit Result: No skin irritation (OECD Test Guideline 404) Serious eye damage/eye irritation Eyes - rabbit Result: Irritating to eyes. (OECD Test Guideline 405) Respiratory or skin sensitisation Buehler Test - guinea pig Did not cause sensitisation on laboratory animals. (OECD Test Guideline 406) Germ cell mutagenicity Hamster ovary Result: negative Mutation in mammalian somatic cells. Ames test



S. typhimurium

Result: Not mutagenic in Ames Test.

Hamster

ovary Result: Equivocal evidence. Sister chromatid exchange Mutagenicity (micronucleus test)

Result: Positive results were obtained in some in vivo tests.

Carcinogenicity
No evidence of carcinogenicity in animal studies (when indicated)
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity

Asimal testing did not show any effects on fertility

Animal testing did not show any effects on fertility.

Specific target organ toxicity - single exposure
The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

Aspiration hazard
No aspiration toxicity classification
Additional Information
RTECS: AL7700000
Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions.,
The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhoea,
Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of
coordination, stupor, death

## 12. ECOLOGICAL INFORMATION

no data available

12.1 Toxicity no data available 12.2 Persistence and degradability no data available
12.3 Bioaccumulative potential no data available 12.4 Mobility in soil no data available 12.5 Results of PBT and vPvB assessment no data available 12.6 Other adverse effects

## 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal

Contaminated packaging Dispose of as unused product.



# 14. TRANSPORT INFORMATION

14.1 UN number
ADR/RID: 1648 IMDG: 1648 IATA: 1648
14.2 UN proper shipping name
ADR/RID: ACETONITRILE
IMDG: ACETONITRILE
IATA: Acetonitrile
14.3 Transport hazard class(es)
ADR/RID: 3 IMDG: 3 IATA: 3
14.4 Packaging group
ADR/RID: II IMDG: II IATA: II
14.5 Environmental hazards
ADR/RID: no IMDG Marine Pollutant: no IATA: no
14.6 Special precautions for user
no data available

# 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of the regulation named on the first page of this SDS. 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture no data available 15.2 Chemical Safety Assessment no data available

# **16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. For lab use only!