according to UK REACH Regulation

isoSGMIB precursor

Revision date: 16.06.2022 Product code: 7021 Page 1 of 6

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

1.1. Product identifier

isoSGMIB precursor

Further trade names

Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl][[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]amino]met hyl]-5-(trimethylstannyl)-2,5-dioxo-1-pyrrolidinyl ester

synonyms: N-Succinimidyl-3-(1,2-bis-BOC-guanidino)-methyl-5-(trimethylstannyl)-benzoate.

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

Use of the substance/mixture

isoSGMIB precursor may be used as precursor for [131I]isoSGMIB.

1.3. Details of the supplier of the safety data sheet

Company name: ABX advanced biochemical compounds

Biomedizinische Forschungsreagenzien GmbH

Street: Heinrich-Gläser-Straße 10-14

Place: 01454 Radeberg

Telephone: +49 3528 4041 60 Telefax: +49 3528 4041 65

e-mail: info@abx.de

Contact person: Dr. Christoph Meyer Telephone: +49 3528 4041 8732

e-mail: meyer@abx.de
Internet: http://www.abx.de

1.4. Emergency telephone +49 3528 4041 60

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Acute Tox. 3; H301 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT RE 1; H372 Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl][[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]amino]met hyl]-5-(trimethylstannyl)-2,5-dioxo-1-pyrrolidinyl ester

Signal word: Danger

Pictograms:







Hazard statements

H301 Toxic if swallowed.

according to UK REACH Regulation

| isoSGMIB precursor | | | | | | |
|---------------------------|--|-------------|--|--|--|--|
| Revision date: 16.06.2022 | Product code: 7021 | Page 2 of 6 | | | | |
| H312 | Harmful in contact with skin. | | | | | |
| H315 | Causes skin irritation. | | | | | |
| H319 | Causes serious eye irritation. | | | | | |
| H372 | Causes damage to organs through prolonged or repeated exposure. | | | | | |
| H410 | Very toxic to aquatic life with long lasting effects. | | | | | |
| Precautionary statemen | nts | | | | | |
| P273 | Avoid release to the environment. | | | | | |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection/hearing protection. | | | | | |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor. | | | | | |
| P302+P352 | IF ON SKIN: Wash with plenty of water. | | | | | |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. | | | | | |

SECTION 3: Composition/information on ingredients

3.1. Substances

P314

Chemical characterization

Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl]][[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]amino]met

Get medical advice/attention if you feel unwell.

hyl]-5-(trimethylstannyl)-2,5-dioxo-1-pyrrolidinyl ester Sum formula: C26H38N4O8Sn

Molecular weight: 653,31

Hazardous components

| CAS No | Chemical name | | | Quantity | |
|--------|--|----------|--|--------------|--|
| | EC No | Index No | | REACH No | |
| | Classification (GB CLP Regulation) | | | | |
| | Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl] [[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]ami | | | 95 - < 100 % | |
| | Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT RE 1, Aquatic Chronic 1; H301 H312 H315 H319 H372 H410 | | | | |

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

| CAS No | EC No | Chemical name | Quantity |
|---|--|---|--------------|
| | Specific Conc. Limits, M-factors and ATE | | |
| | | Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl] [[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]ami | 95 - < 100 % |
| dermal: ATE = 1100 mg/kg; oral: ATE = 100 mg/kg | | | |

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection!

After inhalation

No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. Call a physician immediately. Provide fresh air. In case of breathing difficulties administer oxygen. In all cases of doubt, or when symptoms persist, seek medical advice.

After contact with skin

Medical treatment necessary. After contact with skin, wash immediately with: Water. Change contaminated clothing. Seek medical advice.

according to UK REACH Regulation

isoSGMIB precursor

Revision date: 16.06.2022 Product code: 7021 Page 3 of 6

After contact with eyes

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Suitable extinguishing media: Water spray. Foam. Extinguishing powder. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon dioxide (CO2). Carbon monoxide Nitrogen oxides (NOx).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

Additional information

Suppress gases/vapours/mists with water spray jet. Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. Avoid contact with skin, eyes and clothes. Wear personal protection equipment.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

Other information

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Avoid dust formation. Clear contaminated areas thoroughly.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Protect skin by using skin protective cream. After work, wash hands and face. Do not eat, drink, smoke or sneeze at the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container dry. Keep locked up. Store in a place accessible by authorized persons only. Keep container tightly closed in a cool, well-ventilated place. Restrict access to stockrooms.

Further information on storage conditions

storage temperature:

of °C:-25

up to °C:-15

Store under (Gas): argon. Nitrogen.

Protect against: Light.

SECTION 8: Exposure controls/personal protection

according to UK REACH Regulation

isoSGMIB precursor

Revision date: 16.06.2022 Product code: 7021 Page 4 of 6

8.1. Control parameters

Additional advice on limit values

To date, no national critical limit values exist.

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

Individual protection measures, such as personal protective equipment

Respiratory protection

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe dust.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: colourless

Changes in the physical state

Water solubility:

The study does not need to be conducted because the substance is known to be insoluble in water.

Solubility in other solvents

Chloroform, Dimethylformamide Methanol. ethyl acetate.

SECTION 10: Stability and reactivity

10.5. Incompatible materials

Water. Oxidizing agents, strong.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NOx). Toxic metal oxide smoke.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Toxic. Acute toxicity, oral. Acute toxicity, inhalant. Acute toxicity, dermal.

| CAS No | Chemical name | | | | | |
|--------|--|-------------------|---------|--------|--------|--|
| | Exposure route | Dose | Species | Source | Method | |
| | Benzoic acid-3-[[[(1,1-dimethylethoxy)carbonyl][[[(1,1-dimethylethoxy)carbonyl]amino]iminomethyl]ami | | | | | |
| | oral | ATE 100 mg/kg | | | | |
| | dermal | ATE 1100 mg/kg | | | | |

Irritation and corrosivity

Irritating to eyes. After skin contact: irritant.

Carcinogenic/mutagenic/toxic effects for reproduction

Toxicological data are not available.

STOT-repeated exposure

Danger of serious damage to health by prolonged exposure.

Further information

Data obtained by analogy conclusion, e.g. QSAR.

according to UK REACH Regulation

isoSGMIB precursor

Revision date: 16.06.2022 Product code: 7021 Page 5 of 6

SECTION 12: Ecological information

12.1. Toxicity

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

12.5. Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of UK REACH.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms.

Further information

Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; discarded organic chemicals consisting of or containing hazardous

substances; hazardous waste

List of Wastes Code - used product

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; discarded organic chemicals consisting of or containing hazardous

substances; hazardous waste

Contaminated packaging

Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 3146

14.2. UN proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S (contains

Trimethyltin-dopa-derivate)

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3146

14.2. UN proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S (contains

Trimethyltin-derivate)

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1

Marine transport (IMDG)

14.1. UN number or ID number: UN 3146

14.2. UN proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S (contains

Trimethyltin-derivate)

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1

Air transport (ICAO-TI/IATA-DGR)

according to UK REACH Regulation

isoSGMIB precursor

Revision date: 16.06.2022 Product code: 7021 Page 6 of 6

14.1. UN number or ID number: UN 3146

14.2. UN proper shipping name: ORGANOTIN COMPOUND, SOLID, N.O.S (contains

Trimethyltin-derivate)

14.3. Transport hazard class(es):6.114.4. Packing group:IIIHazard label:6.1

SECTION 15: Regulatory information

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

National regulatory information

Water hazard class (D): 3 - highly hazardous to water

SECTION 16: Other information

Relevant H and EUH statements (number and full text)

H301 Toxic if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H372 Causes damage to organs through prolonged or repeated exposure.

H410 Very toxic to aquatic life with long lasting effects.