

1944900

Revision: 25.10.2016
Printing date: 25.10.2016

01 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name:
Big Endothelin-1 (human)
- Article number:
new: 4014579 old: H-9030
- CAS Number:
120796-97-6
- Relevant identified uses of the substance or mixture and uses advised against
- Application of the substance / the preparation
Laboratory chemicals
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
Bachem AG
Hauptstrasse 144
CH-4416 Bubendorf
Switzerland
E-mail msds@bachem.com
Tel +41 58 595 2021
Fax +41 58 595 2040
- Further information obtainable from:
Department: Marketing
- Emergency telephone number:
+41 44 251 51 51 (Tox Info Suisse)

02 Hazards identification

- Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008



GHS07

Acute Tox. 4 - H302 Harmful if swallowed.
Acute Tox. 4 - H312 Harmful in contact with skin.
Acute Tox. 4 - H332 Harmful if inhaled.

- Label elements
- Labelling according to Regulation (EC) No 1272/2008



GHS07

- Signal word
Warning
- Hazard statements
H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
- Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P501 Dispose of contents/container in accordance with local/regional/ national/international regulations.

(Contd. on page 2)

1944900

Revision: 25.10.2016
Printing date: 25.10.2016

PRODUCT : Big Endothelin-1 (human)

(Contd. of page 1)

- Other hazards
- Results of PBT and vPvB assessment
- PBT:
Not applicable.
- vPvB:
Not applicable.

03 Composition/information on ingredients

- Chemical characterization: Substances
- | CAS No. | Description |
|----------------|--------------------------|
| 120796-97-6 | Big Endothelin-1 (human) |
- Identification number(s)
 - EC number:
-
 - RTECS Number:
-

04 First aid measures

- Description of first aid measures
- General information:
Involve doctor immediately.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- After inhalation:
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
Call a doctor immediately.
- After skin contact:
Seek immediate medical advice.
- After eye contact:
Rinse opened eye for several minutes under running water.
- After swallowing:
Call for a doctor immediately.
- Information for doctor:
- Most important symptoms and effects, both acute and delayed
No further relevant information available.
- Indication of any immediate medical attention and special treatment needed
No further relevant information available.

05 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents:
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture
No further relevant information available.
- Advice for firefighters
- Protective equipment:
Mouth respiratory protective device.

06 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
Avoid formation of dust.
Use respiratory protective device against the effects of fumes/dust/ aerosol.
Wear protective clothing.
- Environmental precautions:
Suppress gases/fumes/haze with water spray.
- Methods and material for containment and cleaning up:

(Contd. on page 3)

1944900

 Revision: 25.10.2016
 Printing date: 25.10.2016

PRODUCT : Big Endothelin-1 (human)

(Contd. of page 2)

- Dispose contaminated material as waste according to item 13.
- Reference to other sections

07 Handling and storage

- Handling:
 - Precautions for safe handling
 - Thorough dedusting.
 - Ensure good ventilation/exhaustion at the workplace.
 - Open and handle receptacle with care.
 - Prevent formation of dust.
 - Information about fire - and explosion protection:
 - Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
- Storage:
 - Requirements to be met by storerooms and receptacles:
 - No special requirements.
 - Information about storage in one common storage facility:
 - Store away from foodstuffs.
 - Further information about storage conditions:
 - Keep container tightly sealed.
 - Store in dry conditions.
 - Recommended storage temperature:
 - < -15 °C
 - Specific end use(s)
 - No further relevant information available.

08 Exposure controls/personal protection

- Control parameters
- Ingredients with limit values that require monitoring at the workplace:

| | |
|----------------|--------------------------------|
| CAS No. | Designation of material |
| Not required. | |
- Additional information:
 - The lists valid during the making were used as basis.
- Exposure controls
- Personal protective equipment:
 - General protective and hygienic measures:
 - Keep away from foodstuffs, beverages and feed.
 - Store protective clothing separately.
 - Avoid contact with the eyes and skin.
 - Respiratory protection:
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
 - Protection of hands:
 - The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
 - Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
 - Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
 - Protective gloves
 - Material of gloves
 - The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
 - Penetration time of glove material
 - The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
 - Eye protection:
 - Safety glasses

GB

(Contd. on page 4)

1944900

 Revision: 25.10.2016
 Printing date: 25.10.2016

PRODUCT : Big Endothelin-1 (human)

(Contd. of page 3)

09 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance:

| | |
|-------------------------|------------------|
| Form: | Powder |
| Colour: | White |
| Odour: | Nearly odourless |
| Odour threshold: | Not determined. |
| pH-value: | Not determined. |

Change in condition

Boiling point/Boiling range: Undetermined.

Flash point: Not applicable.

Flammability (solid, gaseous): Not applicable.

Ignition temperature:

Decomposition temperature: Not determined.

Self-igniting: Not determined.

Danger of explosion: Not determined.

Explosion limits:

Lower: Not determined.

Upper: Not determined.

Vapour pressure: Not determined.

Density: Not determined.

Solubility in / Miscibility with

water: Not determined.

Viscosity:

Dynamic: Not determined.

Kinematic: Not determined.

Other information No further relevant information available.

10 Stability and reactivity

- Reactivity
- Chemical stability
- Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.
- Possibility of hazardous reactions
No dangerous reactions known.
- Conditions to avoid
No further relevant information available.
- Incompatible materials:
No further relevant information available.
- Hazardous decomposition products:
No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
No further relevant information available.
- Primary irritant effect:
- on the skin:
No further relevant information available.
- on the eye:
No further relevant information available.

(Contd. on page 5)

1944900

Revision: 25.10.2016
Printing date: 25.10.2016

PRODUCT : Big Endothelin-1 (human)

(Contd. of page 4)

- Sensitization:
No sensitising effects known.

12 Ecological information

- Toxicity
- Aquatic toxicity:
No further relevant information available.
- Persistence and degradability
No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential
No further relevant information available.
- Mobility in soil
No further relevant information available.
- Results of PBT and vPvB assessment
- PBT:
Not applicable.
- vPvB:
Not applicable.
- Other adverse effects
No further relevant information available.

13 Disposal considerations

- Waste treatment methods
- Waste disposal key:
18 02 05
- Uncleaned packaging:
- Recommendation:
Disposal must be made according to official regulations.

14 Transport information

- UN-Number
ADR Void
IMDG Void
IATA Void
- UN proper shipping name
ADR Void
IMDG Void
IATA Void
- Transport hazard class(es)
ADR
Class Void
IMDG
Class Void
IATA
Class Void
- Packing group
ADR Void
IMDG Void
IATA Void
- Environmental hazards:
Not applicable.
- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

(Contd. on page 6)

1944900

Revision: 25.10.2016
Printing date: 25.10.2016

PRODUCT : Big Endothelin-1 (human)

(Contd. of page 5)

Not applicable.

- Transport/Additional information:
Not applicable.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- Chemical safety assessment:
A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing MSDS:
Department: Marketing
- Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
ICAO: International Civil Aviation Organisation
ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
RTECS: Registry of Toxic Effects of Chemical Substances
vPvB: very Persistent and very Bioaccumulative