

SECTION 1: Identification of the substance/mixture and of the company/undertaking 1.1 Product identifiers

Product name : H-89 dihydrochloride

Product Number : 10-2144

Brand : Focus Biomolecules

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

Identified uses : For Laboratory Research Use Only

1.3 Details of the supplier of the safety data sheet

Company : Focus Biomolecules

400 Davis Drive, Suite 600 Plymouth Meeting, PA 19462

Telephone : +1 855-362-8721

E-mail : support@focusbiomolecules.com

1.4 Emergency telephone number

Emergency Phone # : +1-215-565-5428

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Not a

hazardous substance or mixture.

2.2 GHS Label elements, including precautionary statements Not a hazardous

substance or mixture.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : N-[2-(p-Bromocinnamylamino)ethyl]-5-

isoquinolinesulfonamidedihydrochloride

 $Formula\ Molecular \qquad \qquad : \quad C_{20}H_{20}BrN_3O_2S\cdot 2HCl$

weight : 519.28 g/mol

No components need to be disclosed according to the applicable regulations.

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SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

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

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.

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 section 11

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

SECTION 5: Firefighting 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

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, Hydrogen chloride gas, Hydrogen bromide gas

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No

data available

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures Avoid dust formation.

Avoid breathing vapours, mist or gas.

For personal protection see section 8.

6.2 Environmental precautions Do not let

product enter drains.

6.3 Methods and materials for containment and cleaning up Sweep up and shovel. Keep

in suitable, closed containers for disposal.

6.4 Reference to other sections For

disposal see section 13.

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SECTION 7: Handling and storage 7.1

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Recommended

storage temperature -20°C

Keep in a dry place.

Storage class (TRGS 510): 13: Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection 8.1 Control

parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls General

industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm Break through time: 480 min

Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test

method: EN374

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

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customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Appearance | | | | |
|------------|--|-------------------|--|--|
| a)Form: | | powder | | |
| b) | Odour | No data available | | |
| c) | Odour Threshold | No data available | | |
| d) | pH | No data available | | |
| e) | Melting point/freezing point | No data available | | |
| f) | Initial boiling point and boiling range | No data available | | |
| g) | Flash point | No data available | | |
| h) | Evaporation rate | No data available | | |
| i) | Flammability (solid, gas) | No data available | | |
| j) | Upper/lower flammability or explosive limits | No data available | | |
| k) | Vapour pressure | No data available | | |
| 1) | Vapour density | No data available | | |
| m) | Relative density | No data available | | |
| n) | Water solubility | No data available | | |
| o) | Partition coefficient: n-octanol/water | No data available | | |
| p) | Auto-ignition temperature | No data available | | |
| q) | Decomposition temperature | No data available | | |
| r) | Viscosity | No data available | | |

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s) Explosive properties No data available No

t) Oxidizing properties data available

9.2 Other safety information

No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong acids, Strong bases

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx),

Sulphur oxides, Hydrogen chloride gas, Hydrogen bromide gas

Other decomposition products - No data available

In the event of fire: see section 5

SECTION 11: Toxicological information 11.1

Information on toxicological effects

Acute toxicity

No data available

Inhalation: No data available Dermal: No data

available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

Germ cell mutagenicity

No data available

Carcinogenicity

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

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NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known

or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of

regulated carcinogens.

Reproductive toxicity

No data available No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects No data

available

SECTION 13: Disposal considerations 13.1

Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

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SECTION 14: Transport information

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

SECTION 15: Regulatory information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

| N-[2-(p-Bromocinnamylamino)ethyl]-5- | CAS-No. | Revision Date |
|---|-------------|---------------|
| isoquinolinesulfonamide dihvdrochloride | 127243-85-0 | |

New Jersey Right To Know Components

| N-[2-(p-Bromocinnamylamino)ethyl]-5- | CAS-No. | Revision Date |
|---|-------------|---------------|
| isoquinolinesulfonamide dihydrochloride | 127243-85-0 | |

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

Further information

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