

**Safety Data Sheet**

according to UK REACH Regulation

**FBEM precursor**

Revision date: 27.05.2022

Product code: 4398

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

FBEM precursor

**Further trade names**

1H-Pyrrole-2,5-dione, 1-(2-aminoethyl)-, 2,2,2-trifluoroacetate (1:1)

**Synonyms:**

N-(2-Aminoethyl)maleimide trifluoroacetate salt; 2-Maleimidoethylamine trifluoroacetate salt;  
 2-Maleimidoethylamine trifluoroacetate; N-(2-Aminoethyl)maleimide trifluoroacetate; 1H-Pyrrole-2,5-dione, 1-(2-aminoethyl)-, mono(trifluoroacetate); 2-(2,5-Dioxo-2,5-dihydro-pyrrol-1-yl)-ethylamine trifluoroacetate

CAS No: 146474-00-2

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

Precursor for [<sup>18</sup>F]FBEM  
 (N-[2-(4-[<sup>18</sup>F]-fluorobenzamido)ethyl]-maleimide)

**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 number:**

+49 3528 4041 60

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Skin Irrit. 2; H315  
 Eye Irrit. 2; H319  
 STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

FBEM Precursor

Signal word: Warning

Pictograms:

**Hazard statements**

|      |                                |
|------|--------------------------------|
| H315 | Causes skin irritation.        |
| H319 | Causes serious eye irritation. |

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H335 May cause respiratory irritation.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

**SECTION 3: Composition/information on ingredients****3.1. Substances****Chemical characterization**

1H-Pyrrole-2,5-dione, 1-(2-aminoethyl)-, 2,2,2-trifluoroacetate (1:1)

Sum formula: C<sub>8</sub>H<sub>9</sub>F<sub>3</sub>N<sub>2</sub>O<sub>4</sub>

Molecular weight: 254.16

**Hazardous components**

| CAS No      | Chemical name  |          |          | Quantity     |
|-------------|--|----------|----------|--------------|
|             | EC No  | Index No | REACH No |              |
|             | Classification (GB CLP Regulation)                     |          |          |              |
| 146474-00-2 | FBEM Precursor   |          |          | 95 - < 100 % |
|             | Skin Irrit. 2, Eye Irrit. 2, STOT SE 3; H315 H319 H335 |          |          |              |

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

**SECTION 4: First aid measures****4.1. Description of first aid measures****After inhalation**

Provide fresh air.

**After contact with skin**

After contact with skin, wash immediately with: Water. Change contaminated clothing.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.

**After ingestion**

If swallowed, immediately drink: Water. Call a physician immediately.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Co-ordinate fire-fighting measures to the fire surroundings. Suitable extinguishing media: Foam. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>). Atomized water.**5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

**Additional information**

Contaminated fire-fighting water must be collected separately. Do not allow to enter into surface water or drains.

**SECTION 6: Accidental release measures****6.2. Environmental precautions**

Do not allow to enter into surface water or drains.

**6.3. Methods and material for containment and cleaning up**

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**Other information**

Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

Do not breathe dust. Conditions to avoid: skin contact. Eye contact. Wear personal protection equipment.  
When using do not eat, drink, smoke, sniff.

**Advice on general occupational hygiene**

Change contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

**7.2. Conditions for safe storage, including any incompatibilities****Requirements for storage rooms and vessels**

Keep container dry. Keep container tightly closed.

**Further information on storage conditions**

Recommended storage temperature:

of °C: 2

up to °C: 8

Protect against: Light.Store under (Gas): argon. Nitrogen.

**SECTION 8: Exposure controls/personal protection****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.

**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 dimethylsulphoxide (DMSO). Methanol.

**SECTION 10: Stability and reactivity****10.4. Conditions to avoid**

Light.

**10.6. Hazardous decomposition products**

Carbon dioxide. Carbon monoxide. Nitrogen oxides (NO<sub>x</sub>).Fluorines-carbon-hydrogens.

**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in GB CLP Regulation**

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**Information on likely routes of exposure**

Toxicological data are not available.

**Additional information on tests**

The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

**Further information**

Toxicological data are not available.

**SECTION 12: Ecological information****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 to enter into surface water or drains. The classification was carried out according to the calculation method of the Preparations Directive (1999/45/EC).

**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

**List of Wastes Code - contaminated packaging**

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled.

**SECTION 14: Transport information****Other applicable information**

Not a hazardous material with respect to these transportation regulations.

**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**

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**Relevant H and EUH statements (number and full text)**

|      |                                   |
|------|-----------------------------------|
| H315 | Causes skin irritation.           |
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| H335 | May cause respiratory irritation. |