

# Safety Data Sheet

#15798206 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

| PRODUCT        | CAS NUMBER | FORMULA  | VERSION | REVISION DATE |
|----------------|------------|----------|---------|---------------|
| 8-Bromoadenine | 6974-78-3  | C5H4BrN5 | 10      | 21 Sep 2026   |

## SECTION 1

### Identification

#### 1.1 Product identifier

Product name 8-Bromoadenine

CAS number 6974-78-3

EC / EINECS number 230-225-1

Chemical formula C5H4BrN5

Molecular weight 214.02

SMILES BrC1=NC=2N=CN=C(N)C2N1

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

For research and development. Laboratory chemicals. Manufacture of substances.  
Not suitable for human or veterinary purposes

#### 1.3 Details of the supplier of the safety data sheet

Molekula Limited  
1 Millennium Way, Newton Aycliffe  
Durham, DL5 6JW, United Kingdom  
info@molekula.com · +44 (0) 3302 000333

#### 1.4 Emergency telephone number

**0344 892 0111** — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

## SECTION 2

### Hazard identification

#### 2.1 Classification of the substance or mixture

Acute Tox. 4; H302

## 2.2 Label elements



### WARNING

| CODE | HAZARD STATEMENT |
|------|------------------|
|------|------------------|

|      |                      |
|------|----------------------|
| H302 | Harmful if swallowed |
|------|----------------------|

| CODE | PRECAUTIONARY STATEMENT |
|------|-------------------------|
|------|-------------------------|

|      |                                                    |
|------|----------------------------------------------------|
| P270 | Do not eat, drink or smoke when using this product |
|------|----------------------------------------------------|

|          |                                                                           |
|----------|---------------------------------------------------------------------------|
| P301+312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell |
|----------|---------------------------------------------------------------------------|

## 2.3 Other hazards

This substance/mixture does not meet the PBT or vPvB criteria of REACH regulation, annex XIII.  
This product does not contain any known or suspected Endocrine disruptors.

## SECTION 3

### Composition / information on ingredients

#### 3.1 Substances

|      |                |
|------|----------------|
| Name | 8-Bromoadenine |
|------|----------------|

|            |           |
|------------|-----------|
| CAS number | 6974-78-3 |
|------------|-----------|

|           |           |
|-----------|-----------|
| EC number | 230-225-1 |
|-----------|-----------|

|                        |         |
|------------------------|---------|
| Concentration / purity | ~100.0% |
|------------------------|---------|

|                                                          |                    |
|----------------------------------------------------------|--------------------|
| Classification according to Regulation (EC) No 1272/2008 | Acute Tox. 4; H302 |
|----------------------------------------------------------|--------------------|

|                   |      |
|-------------------|------|
| Hazard statements | H302 |
|-------------------|------|

|                               |              |
|-------------------------------|--------------|
| Acute toxicity estimate (ATE) | Not reported |
|-------------------------------|--------------|

|                                    |               |
|------------------------------------|---------------|
| Impurities / stabilising additives | None reported |
|------------------------------------|---------------|

## SECTION 4

### First-aid measures

#### 4.1 Description of first aid measures

|                     |                                                                                                                                            |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inhalation</b>   | Remove victim to fresh air; give oxygen or artificial respiration if breathing is difficult. Seek medical advice if symptoms persist.      |
| <b>Skin contact</b> | Remove contaminated clothing (unless stuck to skin) and wash immediately with plenty of water. Consult a doctor if irritation persists.    |
| <b>Eye contact</b>  | Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses if safe. Seek medical advice if irritation persists. |
| <b>Ingestion</b>    | Rinse mouth with water. Do not induce vomiting. Seek immediate medical advice.                                                             |

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

#### 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: throat irritation, headache, cough, burning sensation. Skin: irritation, itching, redness, pain. Eye: irritation, redness, itching, tearing, stinging. Ingestion: drowsiness, weakness, headache, dizziness, nausea, vomiting.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5

### Fire-fighting measures

#### 5.1 Extinguishing media

**Suitable extinguishing media** Foam, dry powder, carbon dioxide, water spray, sand.

**Unsuitable extinguishing media** Heavy water stream.

#### 5.2 Special hazards arising from the substance or mixture

Non-combustible  
Carbon monoxide (CO)  
Carbon dioxide (CO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)

#### 5.3 Advice for firefighters

Keep container tightly closed and away from heat/sparks. Use water spray to cool exposed containers. Prevent firefighting water from entering the environment.

## SECTION 6

### Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Isolate area, avoid dust formation, eliminate ignition sources. Use self-contained breathing apparatus and chemically protective clothing for emergency responders.

## 6.2 Environmental precautions

Prevent entry into sewers or public waters. Notify authorities if contamination occurs.

## 6.3 Methods and material for containment and cleaning up

Sweep or shovel into suitable containers for disposal. Avoid creating or spreading dust.

## 6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

## SECTION 7

### Handling & storage

#### 7.1 Precautions for safe handling

Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs. Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and launder thoroughly before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

|                     |         |
|---------------------|---------|
| Storage temperature | Ambient |
|---------------------|---------|

|                                                 |                                                                                                                                                                                                    |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conditions for safe storage (incompatibilities) | Keep in original container, cool, well-ventilated, away from heat, direct sunlight, and ignition sources. Store below 20 °C in a dry, closed container. Incompatible with strong oxidizing agents. |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 7.3 Specific end use(s)

See Section 1.2.

## SECTION 8

### Exposure controls / personal protection

#### 8.1 Control parameters

|                                          |               |
|------------------------------------------|---------------|
| Occupational exposure limits (OEL / WEL) | None reported |
|------------------------------------------|---------------|

|                |               |
|----------------|---------------|
| DNEC/PNEC data | None reported |
|----------------|---------------|

## 8.2 Exposure controls

|                                        |                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye / face protection</b>           | Safety glasses<br>Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.                                                                                                                                                                                                   |
| <b>Skin / hand protection</b>          | Suitable protective clothing with elasticated cuffs and closed neck (EN ISO 13982). Disposable nitrile rubber gloves (0.11 mm, >480 min permeation, EN 374).                                                                                                                                                                 |
| <b>Respiratory protection</b>          | Dust mask (FFP2/FFP3)<br>Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387. |
| <b>Other protection</b>                | Adequate ventilation                                                                                                                                                                                                                                                                                                         |
| <b>Environmental exposure controls</b> | No information available.                                                                                                                                                                                                                                                                                                    |

## SECTION 9

### Physical & chemical properties

#### 9.1 Information on basic physical and chemical properties

|                                                          |                                                |
|----------------------------------------------------------|------------------------------------------------|
| <b>Appearance / physical state</b>                       | Powder<br>DERIVED FROM: LITERATURE             |
| <b>Colour</b>                                            | White to off-white<br>DERIVED FROM: LITERATURE |
| <b>Odour</b>                                             | Odourless<br>DERIVED FROM: LITERATURE          |
| <b>Melting / freezing point</b>                          | No data available                              |
| <b>Boiling point</b>                                     | No data available                              |
| <b>Flammability</b>                                      | Not applicable                                 |
| <b>Lower and upper explosion limit</b>                   | Not applicable                                 |
| <b>Flash point</b>                                       | Not applicable                                 |
| <b>Auto-ignition temperature</b>                         | Not applicable                                 |
| <b>Decomposition temperature</b>                         | No data available                              |
| <b>pH</b>                                                | No data available                              |
| <b>Acidity</b>                                           | Base<br>DERIVED FROM: LITERATURE               |
| <b>Kinematic viscosity</b>                               | No data available                              |
| <b>Solubility</b>                                        | No data available                              |
| <b>Partition coefficient n-octanol/water (log value)</b> | No data available                              |
| <b>Vapour pressure</b>                                   | No data available                              |
| <b>Density (g/mL)</b>                                    | Not applicable                                 |

|                         |                   |
|-------------------------|-------------------|
| Relative vapour density | No data available |
|-------------------------|-------------------|

|                          |                   |
|--------------------------|-------------------|
| Particle characteristics | No data available |
|--------------------------|-------------------|

## 9.2 Other information

No data available

## SECTION 10

### Stability & reactivity

#### 10.1 Reactivity

None known, based on information available

#### 10.2 Chemical stability

Stable under recommended handling and storage conditions

#### 10.3 Possibility of hazardous reactions

None under normal processing.

#### 10.4 Conditions to avoid

Protect from sunlight; keep away from heat, hot surfaces, sparks, open flames, and other ignition sources; no smoking

#### 10.5 Incompatible materials

Strong oxidizers

#### 10.6 Hazardous decomposition products

See section 5

## SECTION 11

### Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

|                              |                                   |
|------------------------------|-----------------------------------|
| Acute toxicity (LD50 / LC50) | Oral: Harmful if swallowed (H302) |
|------------------------------|-----------------------------------|

|                             |                   |
|-----------------------------|-------------------|
| Skin corrosion / irritation | No data available |
|-----------------------------|-------------------|

|                            |                   |
|----------------------------|-------------------|
| Eye corrosion / irritation | No data available |
|----------------------------|-------------------|

|                                  |                   |
|----------------------------------|-------------------|
| Respiratory / skin sensitisation | No data available |
|----------------------------------|-------------------|

|                 |                                                           |
|-----------------|-----------------------------------------------------------|
| Carcinogenicity | There are no known carcinogenic chemicals in this product |
|-----------------|-----------------------------------------------------------|

|              |                                                        |
|--------------|--------------------------------------------------------|
| Mutagenicity | There are no known mutagenic chemicals in this product |
|--------------|--------------------------------------------------------|

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Reproductive toxicity | There are no known reproductive toxicants in this product |
|-----------------------|-----------------------------------------------------------|

|                                   |                   |
|-----------------------------------|-------------------|
| STOT (single / repeated exposure) | No data available |
|-----------------------------------|-------------------|

|                   |                       |
|-------------------|-----------------------|
| Aspiration hazard | Solid; not applicable |
|-------------------|-----------------------|

### 11.2 Information on other hazards

This product does not contain any known or suspected endocrine disruptors

## SECTION 12

### Ecological information

#### 12.1 Toxicity

Contains no substances known to be hazardous to the environment or non-degradable in wastewater treatment plants

#### 12.2 Persistence and degradability

No information available

#### 12.3 Bioaccumulative potential

No information available

#### 12.4 Mobility in soil

No information available

#### 12.5 Results of PBT and vPvB assessment

No data available for assessment

#### 12.6 Endocrine disrupting properties

See Section 11.2.

#### 12.7 Other adverse effects

No data available

## SECTION 13

### Disposal considerations

#### 13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

## SECTION 14

### Transport information

#### 14.1 UN number or ID number

Not applicable

#### 14.2 UN proper shipping name

Not applicable

#### 14.3 Transport hazard class(es)

Not applicable

#### 14.4 Packing group

*Not applicable*

#### 14.5 Environmental hazards

*Not applicable*

#### 14.6 Special precautions for user

**Special precautions for user** *Not applicable*

**Transport category** *Not applicable*

**Tunnel code** *Not applicable*

**Packing instruction (ADR)** *Not applicable*

**Packing instruction (IMDG)** *Not applicable*

#### 14.7 Maritime transport in bulk according to IMO instruments

*No data available*

### SECTION 15

#### Regulatory information

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

**Substance-specific regulations (e.g. licences)** Water endangering class = 3 (self classification)

**REACH code** Y110

**ECHA notification** *Not applicable*

##### 15.2 Chemical safety assessment

*Not applicable*

### SECTION 16

#### Other information

**Revision notes / other information** This MSDS (v10) was created 21.09.2026 and replaces v1 (30.08.2019).

Acute tox. 4 - Acute toxicity, oral, hazard category 4  
H302- Harmful if swallowed

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at [info@molekula.com](mailto:info@molekula.com).