



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision Date 27-Aug-2024

Revision Number 1.1

**100-0889 - Bzotropyne (Mesylate)**

## Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Document Number	10000012584
Product Name	Bzotropyne (Mesylate)
Synonym	NSC 169913; (3-endo)-3-(diphenylmethoxy)-8-methyl-8-azabicyclo[3.2.1]octane, monomethanesulfonate
Pure substance/mixture	Substance
Contains 3-benzhydryloxy-8-methyl-8-azabicyclo[3.2.1]octane; methanesulfonic acid	
Molecular weight	403.5

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

Recommended Use	Laboratory chemical
Uses advised against	No information available

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

#### Manufacturer

STEMCELL Technologies SARL  
40 Rue des Berges, Miniparc Polytec, Bâtiment Sirocco, 38000 Grenoble, France  
+33 (0) 4 76 04 75 30  
STEMCELL Technologies Germany GmbH  
Stolberger Str. 200, 50933, Köln, Germany  
+33 (0) 4 76 04 75 30  
STEMCELL Technologies UK Ltd.  
Building 7100, Cambridge Research Park, Beach Drive, Waterbeach, Cambridge, UK, CB25 9TL  
+33 (0) 4 76 04 75 30

For further information, please contact

### 1.4. Emergency telephone number

Emergency Telephone	No information available
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Emergency Telephone - \$45 - (EC)1272/2008	
Europe	112

## Section 2: HAZARDS IDENTIFICATION



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### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Oral	Category 1 - (H300)
Acute toxicity - Dermal	Category 1 - (H310)
Acute toxicity - Inhalation (Dusts/Mists)	Category 1 - (H330)
Specific target organ toxicity (single exposure)	Category 1 - (H370)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)

### 2.2. Label elements

205-048-8

Contains 3-benzhydryloxy-8-methyl-8-azabicyclo[3.2.1]octane;methanesulfonic acid



### Signal word

Danger

### Hazard statements

#### Hazard statements

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H330 - Fatal if inhaled

H370 - Causes damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

### Precautionary Statements - EU (§28, 1272/2008)

P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor

P280 - Wear eye protection/ face protection

P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label)

P322 - Specific measures (see .? on this label)

P361 + P364 - Take off immediately all contaminated clothing and wash it before reuse

P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

P310 - Immediately call a POISON CENTER or doctor

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P422 - Store contents under inert gas

P260 - Do not breathe dust/fume/gas/mist/vapors/spray

P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor

P314 - Get medical advice/attention if you feel unwell

P501 - Dispose of contents/container to industrial incineration plant

### Additional information

This product requires child resistant fastenings if supplied to the general public This product requires tactile warnings if supplied to the general public



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### 2.3. Other hazards

No information available

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Synonym

Chemical name	EC No.	CAS No.	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
3-benzhydryloxy-8-methyl-8-azabicyclo[3.2.1]octane;methanesulfonic acid	205-048-8	132-17-2	100	Acute Toxicity – Oral – Acute Tox. 1 (H300) Acute Toxicity – Dermal – Acute Tox. 1 (H310) Acute Toxicity – Inhalation – Acute Tox. 1 (H330) Specific Target Organ Toxicity – Single Exposure – STOT SE 1 (H370) Specific Target Organ Toxicity – Repeated Exposure – STOT RE 2 (H373)	No data available

Full text of H- and EUH-phrases: see section 16

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. IF exposed or concerned: Get medical advice/attention.
Eye contact	Get immediate medical advice/attention. Keep eye wide open while rinsing. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Skin contact	Get immediate medical advice/attention. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
Ingestion	Get immediate medical advice/attention. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious



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person.

### Self-protection of the first aider

Wear personal protective clothing (see section 8). Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.

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

#### Symptoms

No information available.

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

#### Note to physicians

Treat symptomatically.

## Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable Extinguishing Media

No information available.

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

#### Specific hazards arising from the chemical

No information available.

### 5.3. Advice for firefighters

#### Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

#### Personal precautions

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas.

#### Other Information

Refer to protective measures listed in Sections 7 and 8.

#### For emergency responders

Use personal protection recommended in Section 8.

### 6.2. Environmental precautions



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**Environmental precautions** Prevent further leakage or spillage if safe to do so.

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

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## Section 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

**Advice on safe handling** Avoid contact with skin, eyes or clothing. Take off contaminated clothing and wash before reuse. Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

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

**Storage Conditions** Keep out of the reach of children. Store locked up. Store in accordance with information listed on the Product Information Sheet (PIS).

### 7.3. Specific end use(s)

#### Identified Uses

**Risk Management Methods (RMM)** The information required is contained in this Material Safety Data Sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.



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**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

#### Personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Hand protection** Wear suitable gloves. Impervious gloves.

**Skin and body protection** Impervious clothing. Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron.

**Respiratory protection** No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

**Environmental exposure controls** No information available.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

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

**Physical state** Solid  
**Appearance** Crystalline  
**Color** No information available  
**Odor** No data available.  
**Odor threshold** No data available

Property	Values	Remarks • Method
pH	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known



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Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	Product is not flammable.	None known
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	DMF: 30 mg/mL; DMSO: 30 mg/mL; Ethanol: 30 mg/mL; PBS (pH 7.2): 10 mg/mL	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	Product does not present an explosion hazard.	
Oxidizing properties	No information available	
<b>9.2. Other information</b>		
Softening point	No information available	
Molecular weight	403.5	
Molecular formula	C <sub>21</sub> H <sub>25</sub> NO • CH <sub>3</sub> SO <sub>3</sub> H	
VOC Content (%)	No information available	
Liquid Density	No information available	
Bulk density	No information available	

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

Reactivity No information available.

### 10.2. Chemical stability

Stability Stable under recommended transport or storage conditions.

### Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

### 10.3. Possibility of hazardous reactions



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**Possibility of hazardous reactions** None under normal processing.

### 10.4. Conditions to avoid

**Conditions to avoid** None known based on information supplied.

### 10.5. Incompatible materials

**Incompatible materials** Strong oxidizing agents.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Nitrogen oxides (NO<sub>x</sub>). Sulfur oxides.

## Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Information on likely routes of exposure

##### Product Information

<b>Inhalation</b>	Specific test data for the substance or mixture is not available.
<b>Eye contact</b>	Specific test data for the substance or mixture is not available.
<b>Skin contact</b>	Specific test data for the substance or mixture is not available. Fatal in contact with skin. (based on components).
<b>Ingestion</b>	Specific test data for the substance or mixture is not available. Fatal if swallowed. (based on components).

#### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** No information available.

#### Numerical measures of toxicity

##### Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

<b>ATEmix (oral)</b>	0.500 mg/kg
<b>ATEmix (dermal)</b>	5.00 mg/kg
<b>ATEmix (inhalation-dust/mist)</b>	0.005 mg/l

**Unknown acute toxicity** 100 % of the mixture consists of ingredient(s) of unknown toxicity.





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0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.  
 100 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.  
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).  
 100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor).  
 0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

### Product Information

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
3-benzhydryloxy-8-methyl-8-azabicyclo[3.2.1]octane;methanesulfonic acid	= 940 mg/kg ( Rat )		

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** No information available.

#### Product Information

**Serious eye damage/eye irritation** No information available.

#### Product Information

**Respiratory or skin sensitization** No information available.

#### Product Information

**Germ cell mutagenicity** No information available.

#### Product Information

**Carcinogenicity** No information available.

#### Product Information

**Reproductive toxicity** No information available.

#### Product Information

**STOT - single exposure** Based on the classification criteria of the Globally Harmonized System as adopted in the country or region with which this safety data sheet complies, this product has been determined to cause systemic target organ toxicity from acute exposure. (STOT SE). Causes damage to organs if swallowed. Causes damage to organs in contact with skin.

#### Product Information

**STOT - repeated exposure** May cause damage to organs.

#### Product Information

**Aspiration hazard** No information available.



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### Section 12: ECOLOGICAL INFORMATION

#### 12.1. Toxicity

**Ecotoxicity** The environmental impact of this product has not been fully investigated.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

#### Product Information

#### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

#### 12.3. Bioaccumulative potential

**Bioaccumulation** No information available.

#### 12.4. Mobility in soil

**Mobility in soil** No information available.

#### 12.5. Results of PBT and vPvB assessment

**PBT and vPvB assessment** No information available.

#### 12.6. Other adverse effects

**Other adverse effects** No information available.

### Section 13: DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

**Contaminated packaging** Do not reuse empty containers.

### Section 14: TRANSPORT INFORMATION

**Note:** When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity



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Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. Therefore packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.

### IMDG

14.1 UN Number	UN2811
14.2 UN proper shipping name	TOXIC SOLID, ORGANIC, N.O.S. (Bzotropine(mesylate))
14.3 Transport hazard class(es)	6.1 Toxic substances
14.4 Packing Group	I
14.5 Marine pollutant	Not applicable
14.6 Special Provisions	None
14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code	No information available

### RID

14.1 UN Number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

### ADR

14.1 UN Number	Not regulated
14.2 UN proper shipping name	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packing Group	Not regulated
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

### IATA

14.1 UN Number	UN2811
14.2 UN proper shipping name	Toxic solid, organic, n.o.s. (Bzotropine (mesylate))
14.3 Transport hazard class(es)	6.1 Toxic substances
14.4 Packing Group	I
14.5 Environmental hazard	Not applicable
14.6 Special Provisions	None

## Section 15: REGULATORY INFORMATION

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

#### European Union



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Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

### Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

### Persistent Organic Pollutants

Not applicable

### Dangerous substance category per Seveso Directive (2012/18/EU)

H1 - ACUTE TOXIC

H3 - STOT SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

### International Inventories

TSCA	Does not comply
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Does not comply
IECSC	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Complies

### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

Chemical Safety Report No information available

## Section 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet



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### Full text of H-Statements referred to under section 3

H300 - Fatal if swallowed

H310 - Fatal in contact with skin

H330 - Fatal if inhaled

H370 - Causes damage to organs

H373 - May cause damage to organs through prolonged or repeated exposure

### Legend

SVHC: Substances of Very High Concern for Authorization:

### Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA

TWA (time-weighted average)

STEL

STEL (Short Term Exposure Limit)

Ceiling

Maximum limit value

\*

Skin designation

Revision Date

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product.