# SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY / UNDERTAKING

**1.1 Product identifier.**

**Product name:** **beta Tubulin Mouse Monoclonal Antibody [1-B11]**

**Product number:** **EM0103**

**Pure substance/mixture:** Mixture

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

**Product use:** For research purposes only. Not for diagnostic purposes

**1.3 Details of the supplier of the safety data sheet:**

**Company:**

HUABIO
300 Tradecenter Drive, Suite 1710
Woburn, MA 01801, USA
E-mail address: support@huabio.com

# SECTION 2. HAZARDS IDENTIFICATION

**2.1 Classification of the substance or mixture according to CLP No 1272 / 2008/GB CLP.**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

**2.2 Label elements CLP No 1272/2008/GB CLP.**

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

**2.3 Other hazards.**
Contains no PBT or vPvB substances according to REACH No 1907/2006.
This mixture does not contain substances with endocrine disrupting properties in accordance with the criteria laid down in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

**3.1 Subtance:**
The product is a mixture.

**3.2 Mixtures:**

| CAS/EC No | REACH No | Name | Content % | Classification |
|---|---|---|---|---|
| 56-81-5 / 200-289-5 | 01-2119471987-18- XXXX | Glycerine | >= 30 - < 50 % | Not classified |

## SECTION 4. FIRST AID MEASURES

**4.1 Description of first aid measures.**

**Inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing.

**Skin contact:** Wash skin with plenty of soap and water. Seek doctor if irritation persist.

**Eye contact:** Remove contact lenses. Flush eyes with plenty of water for several minutes. Make sure you flush under the upper and lower eyelids. If irritation continues, contact a doctor.

**Swallow:** Rinse mouth

**4.2 Most important symptoms and effects, both acute and delayed:**

For more information, see Section 2.2.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Treat symptomatically.

## SECTION 5. FIRE FIGHTING MEASURES

**5.1 Extinguishing media:** Water spray, dry chemical, carbon dioxide (CO2) or chemical foam.

**Unsuitable extinguishing media:**

For this substance/mixture no limitations of extinguishing agents are given.

**5.2 Special hazards arising from the substance or mixture:**

Carbon oxides

Not combustible.

**5.3 Advice for firefighters:** Do not enter fire area without proper protective equipment, including respiratory protection.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation.

**6.2 Environmental precautions:**

See section 12 for additional environmental disclosures.

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

Avoid further leaks or spills if it is safe to do.

Pick up mechanically and dispose of in suitable containers.

**6.4 Reference to other sections:**

See section 8 for information on personal protection equipment.

See section 13 for disposal information.

## SECTION 7. HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

Ensure adequate ventilation.

**7.2 Conditions for safe storage, including any incompatibilities:**

Keep container tightly closed and recommended storage temperature -20 °C.
Storage class (TRGS 510) LGK 10.

**7.3 Specific end use(s):** The identified uses for this product are detailed in Section 1.2.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Control parameters

| Chemical Name | EU OEL (TWA) | EU OEL (STEL) | EU Skin Notation |
|---|---|---|---|
| Glycerin 56-81-5 | None | None | None |

| Chemical Name | Austria | Belgium (TWA) | Czech Republic |
|---|---|---|---|
| Glycerin 56-81-5 | None | 10 mg/m³ | 10 mg/m³ TWA<br>15 mg/m³ Ceiling |

| Chemical Name | Denmark (TWA) | Finland OEL (TWA) | France OEL (VME) |
|---|---|---|---|
| Glycerin 56-81-5 | None | None | 10 mg/m³ |

| Chemical Name | Germany OEL (TWA) | Ireland (TWA) | Italy OEL (TWA) |
|---|---|---|---|
| Glycerin 56-81-5 | 200 mg/m³ exposure factor 2 | None | None |

| Chemical Name | Lithuania OEL (TWA) | Netherlands OEL (MAC) | Norway |
|---|---|---|---|
| Glycerin 56-81-5 | None | None | None |

| Chemical Name | Poland | Portugal | Spain OEL (TWA) |
|---|---|---|---|
| Glycerin 56-81-5 | 10 mg/m³ TWA | 10 mg/m³ TWA | 10 mg/m³ |

| Chemical Name | Sweden - Occupational Exposure Limits - TLVs (LLVs) | Switzerland | United Kingdom |
|---|---|---|---|
| Glycerin 56-81-5 | None | 100 mg/m³ STEL<br>50 mg/m³ TWA | 10 mg/m³ TWA (mist) |

### 8.2 Exposure controls.

**Appropriate technical measures:**
Change contaminated clothing. Wash hands after working with substance.

**General information:** Make sure that eyewash station is available.

**Personal protective equipment:**
Only CE-marked personal protection equipment should be used.

**Respiratory protection:** Not necessary.



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**Hand protection:** Wear gloves. EN 374.
Option: Nitrile gloves: ≥120 min.
Thickness: ≥0.25 mm.

**Eye protection:** Wear tightly safety goggles. EN 166.

**Body protection:** Normal work clothing.

**Measures to avoid environmental exposure:**
No special precautions are necessary.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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

| | |
|---|---|
| Physical state: | Liquid |
| Colour: | No data available. |
| Odour: | No data available. |
| Melting point/freezing point: | No data available. |
| Boiling point: | No data available. |
| Flammability: | No data available. |
| Lower and upper explosion limit: | No data available. |
| Flash point: | No data available. |
| Auto-ignition temperature: | No data available. |
| Decomposition temperature: | No data available. |
| pH: | No data available. |
| Kinematic viscosity: | No data available. |
| Solubility: | No data available. |
| Partition coefficient n-octanol/water: | No data available. |
| Vapour pressure: | No data available. |
| Density and/or relative density: | No data available. |
| Relative vapour density: | No data available. |
| Particle characteristics: | No data available. |

**9.2 Other information:**
None.

## SECTION 10. STABILITY AND REACTIVITY

**10.1 Reactivity:** No information is available.

**10.2 Chemical stability:** Stable under normal conditions.

**10.3 Possibility of hazardous reactions:**
None known.

**10.4 Conditions to avoid:** None known.

**10.5 Incompatible materials:** Strong oxidizing agents.

**10.6 Hazardous decomposition products:**
According to available information, none known.

## SECTION 11. TOXICOLOGICAL INFORMATION

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

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|
| Glycerin | = 12600 mg/kg Oral | > 10 g/kg(Rabbit) | >2.75mg/L(Rat) |

| | |
|---|---|
| **Acute toxicity:** | Oral: No date available<br>Inhalation:No date available<br>Dermal: No date available |
| **Skin corrosion/irritation:** | No date available |
| **Serious eye damage/irritation:** | No date available |
| **Respiratory or skin sensitisation:** | No date available |
| **Germ cell mutagenicity:** | No date available |
| **Carcinogenicity:** | No date available |
| **Reproductive toxicity:** | No date available |
| **Specific target organ toxicity - single exposure:** | No date available |
| **Specific target organ toxicity - repeated exposure:** | No date available |
| **Aspiration hazard:** | No date available |

**11.2 Information on other hazards:**

**Endocrine disrupting properties:**

The product/substance has no endocrine disrupting properties.

**Other information:** Ingestion May irritate the digestive system.
Skin contact Skin irritation.
Eye contact May cause severe eye damage.

## SECTION 12. ECOLOGICAL INFORMATION

**12.1 Toxicity:**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.

| Chemical Name | Toxicity to algae | Toxicity to daphnia and other aquatic invertebrates | Toxicity to fish | Microtox Data | log Pow |
|---|---|---|---|---|---|
| Glycerin | No data available | No data available | No data available | No data available | logPow-1.76 |

**12.2 Persistence and degradability:** Inherently biodegradable.

**12.3 Bioaccumulative potential:** Material does not bioaccumulate.

**12.4 Mobility in soil:** No information available.

**12.5 Result of PBT and vPvB assesment:**

This substancee does not meet the criteria for PBT or vPvB according to regulation.

**12.6 Endocrine disrupting properties:**

The product/substance has no endocrine disrupting properties.

**12.7 Other adverse effects:** None known.

## SECTION 13. DISPOSAL CONSIDERATIONS

**13.1 Waste treatment methods:**

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental regulations.

**Contaminated packing:** Do not reuse emptied containers.

## SECTION 14. TRANSPORT INFORMATION

This product is not classified as dangerous of transport.

| | ADR/RID | IMDG/IMO |
|---|---|---|
| **14.1 UN number or ID number** | Not relevant | Not relevant |

| | | |
|---|---|---|
| **14.2 UN proper shipping name** | Not relevant | Not relevant |
| **14.3 Transport hazard class(es)** | Not relevant | Not relevant |
| **14.4 Packing group** | Not relevant | Not relevant |
| **14.5 Environmental hazards - MP EmS:** | No<br>Not relevant | No<br>Not relevant |
| **Other informations** | LQ: Not relevant<br>Tunnel: Not relevant | LQ: Not relevant<br>Tunnel: Not relevant |

**14.6 Special precautions for user:**

Not relevant.

**14.7 Maritime transport in bulk according to IMO instruments:**

Not relevant.

## SECTION 15. REGULATORY INFORMATION

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

**Sources:** Current ADR regulations 2024. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. Regulation (EU) 2016/425 of 9 March 2016 on personal protective equipment. Hazardous Waste (England and Wales) Regulations 2005 (as amended). EC regulation 1907/2006 (REACH) Directive 2000/532/EC. Seveso directive: 96/82/EC. EC regulation No 2020/878. CLP regulation No 1272/2008. REACH regulation 1907/2006. GB CLP.

**15.2 Chemical safety assessment:**

Not necessary.

## SECTION 16. OTHER INFORMATION

**Additional information:**

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

# Safety data sheet
## Example
Version 1.0
Effective date: 14-08-2024

**Descriptions of possible used abbreviations:**

BCF Bioconcentration factor.
BOD Biochemical Oxygen Demand.
CAS Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).
COD Chemical oxygen demand.
DNEL Derived No-Effect Level.
EC50 Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval.
IMDG International Maritime Dangerous Goods Code.
LC50 Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval.
LD50 Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval.
log KOW n-Octanol/water.
MARPOL International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant").
PBT Persistent, Bioaccumulative and Toxic.
PNEC Predicted No-Effect Concentration.
UN RTDG UN Recommendations on the Transport of Dangerous Good.
vPvB Very Persistent and very Bioaccumulative.

**Validated by:**
SRS
www.msds-eu.com