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

1.1 Product identifier.

Product name: Spermine synthase Recombinant Rabbit Monoclonal Antibody [JE61-85]

Product number: HA720065

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 / | 01-2119471987-<br>18- XXXX | Glycerine | >= 30 - < 50<br>% | Not classified |
| 200-289-5 |                            |           |                   |                |



### 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  $^{\circ}\,$  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/m <sup>3</sup> | 10 mg/m³ TWA     |
|                  |         |                      | 15 mg/m³ Ceiling |

| Chemical Name    | Denmark (TWA) | Finland OEL (TWA) | France OEL (VME)     |
|------------------|---------------|-------------------|----------------------|
| Glycerin 56-81-5 | None          | None              | 10 mg/m <sup>3</sup> |

| 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/m <sup>3</sup> |
|                  |              |              |                      |

| Chemical Name    | Sweden - Occupational Exposure<br>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.



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. No data available. Melting point/freezing point: No data available. Boiling point: Flammability: No data available. Lower and upper explosion limit: No data available. No data available. Flash point: No data available. Auto-ignition temperature: No data available. Decomposition temperature: No data available. pH: Kinematic viscosity: No data available. Solubility: No data available. Partition coefficient n-octanol/water: No data available. Vapour pressure: No data available. No data available. Density and/or relative density: No data available. Relative vapour density: 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 LC5 0 |
|---------------|--------------------|-------------------|------------------|
| Glycerin      | = 12600 mg/kg Oral | > 10 g/kg(Rabbit) | >2.75mg/L(Rat)   |



Acute toxicity: Oral: No date available

Inhalation:No date available

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<br>and other aquatic<br>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 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