



### 1. PRODUCT/PREPARATION/COMPANY

Trade name: **BEBO (5 mM)**  
**BOXTO (5mM)**

Product Number: 32.001, 32.002

Company: Biotoools, B & M Labs, S.A.  
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### 2. COMPOSITION OF THE PRODUCT/INFORMATION ON INGREDIENTS

Chemical characterization: Solution in DMSO. Volume of each product package: 6000 rxns.

Active ingredients:

CAS-No	EC no	Name	Contents	Danger <sup>1</sup>	Risks
67-68-5	200-664-3	<b>Dimethyl sulfoxide (DMSO)</b>	<90%	F Xi	R 36/37/38 S 26-37/39

### 3. HAZARDS IDENTIFICATION

#### Primary routes of entry

Skin or eye contact from splashes.

#### Ingestion

Harmful if swallowed. May cause irritation to the gastrointestinal tract.

#### Skin contact

May cause irritation

#### Eye contact

Irritating

#### Evidence for reproductive toxicity, carcinogenicity and mutagenicity

No data available

#### Hazard Ingredients

<b>Dimethyl sulfoxide</b>	Irritating to eyes, respiratory system and skin. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and face/eye protection.
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### 4. FIRST AID MEASURES

#### Skin contact

Wash skin with water and soap and rinse thoroughly. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention.

#### Eye contact

Rinse opened eyes for at least 15 min with copious amounts of water. Check for and remove any contact lenses. Call a physician.

#### Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Rinse mouth with plenty of water. Call a physician. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately.

<sup>1</sup> Dangers and risks on active ingredients are applicable to pure ingredients. Amounts present in the specified product are under threshold levels as per Directive 67/548/EC and other European Legislation in force.



**Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

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**5. FIRE FIGHTING MEASURES**

**Suitable extinguishing media**

Water spray, carbon dioxide, dry chemical powder or alcohol- resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Fire and explosion hazards**

Flammable.

**Protective equipment**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

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**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Wear protective gloves and goggles.

**Environmental precautions**

Product must not enter ground, sewerage system or water course

**Measures for cleaning/collecting**

Collect spilled liquid with liquid-binding material or inert absorbent and place it in a container for disposal. Wash spill site after material pickup is complete.

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**7. HANDLING AND STORAGE**

**Handling**

Always keep the containers tightly closed. Observe good laboratory technique when handling. Normal measures for preventive fire protection.

**Storage**

Store in the original container, at -20°C.

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**8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**

**Exposure limits**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

**Eye protection**

Wear goggles

**Hand protection**

Wear protective gloves

**Skin protection**

Wear labcoat

**Hygiene measures**

General industrial hygiene practice.

**Breathing equipment**

Use an approved/certified respirator or equivalent

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Form:** Liquid  
**Colour:** Colorless  
**Odour:** Practically odorless  
**Boiling point:** No data available.

**Flash point:** no data available  
**Explosive properties:** none  
**Vapor pressure:** No data available  
**pH:** No data available.

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## 10. STABILITY AND REACTIVITY

**Stability**  
Stable under normal handling and storage conditions

**Hazardous decomposition products**  
Carbon monoxide, oxides of sulphur, carbon dioxide.  
Formaldehyde, dimethyl sulphide.

**Conditions to avoid**  
Ignition sources, moisture, excess heat.

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## 11. TOXICOLOGICAL INFORMATION

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.  
**Skin** May be harmful if absorbed through skin. May cause skin irritation.  
**Eyes** May cause eye irritation.  
**Ingestion** May be harmful if swallowed.

**Acute toxicity**  
**Dimethyl sulfoxide:** oral; rat; LD50: 14500 mg/kg

**Chronic exposure**  
Products may cause allergic reactions in certain sensitive individuals

**Sensitization**  
No data available

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## 12. ECOLOGICAL INFORMATION

Terrestrial: Expected to be mobile in soil, due to its high water solubility. Some volatilization from dry soil and surfaces may be expected. Aquatic: Dimethyl sulfoxide disproportionates in water to dimethyl sulfide and dimethyl sulfone, a reaction catalyzed by light. Atmospheric: Exists primarily in the vapor phase and be removed by both wet and dry deposition. It will react with photochemically-produced hydroxyl radicals with a half-life of about 7 hr.

DMSO is very difficult to biodegrade.

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## 13. DISPOSAL CONSIDERATIONS

Observe all federal, state and local environmental regulations.  
Controlled disposal in waste system. Product disposal (leftovers or residues resulting from normal use) does not pose any serious hazards in the adequate proportion.  
The product and packaging should be disposed of in accordance with the instructions of the local authorities.

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## 14. TRANSPORT INFORMATION

**RID/ADR**  
Non-hazardous for road transport

**IMDG**  
Non-hazardous for sea transport

**IATA**  
Non-hazardous for air transport

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**15. REGULATORY INFORMATION**

BEBO & BOXTO	
Indication of Danger	F Flammable
	Xi Irritant
R phrases	R22 Harmful if swallowed. R36/37/38 Irritating to eyes, respiratory system and skin.
S Phrases	S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S 37/39 Wear suitable gloves and eye/face protection

**16. OTHER INFORMATION**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge, and is applicable to the product with regards to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Biotoools, B & M Labs, S.A. shall not be held liable for any damage resulting from handling or from contact with the above product.

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