

## Safety Data Sheet (SDS)

**According to Regulation (EC) No. 1907/2006 (REACH)**

**Product:** Sulbutiamine

**CAS number:** 3286-46-2

**Revision date:** 12 March 2026

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### 1. Identification of the substance and of the company

#### Product identifier

Product name: Sulbutiamine

CAS number: 3286-46-2

EC number: 221-937-3

Synonyms: Bisibutiamine; O-Isobutyroylthiamine Disulfide.

#### Relevant identified uses

Chemical reference material

Laboratory research and analytical applications

Not intended for food, drug, cosmetic or household use.

#### Supplier

Rexar

Genestetstraat 3

2394 XK Hazerswoude

Netherlands

Email: [info@rexar.nl](mailto:info@rexar.nl)

#### Emergency information

Contact local poison control centre.

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### 2. Hazards identification

#### Classification according to Regulation (EC) No. 1272/2008 (CLP)

Not classified as hazardous. The reviewed TCI Europe SDS states that Sulbutiamine does **not meet the criteria for classification in any hazard class** under Regulation (EC) No 1272/2008.

## **Label elements**

Pictograms: None

Signal word: None

Hazard statements: None

Precautionary statements: None.

## **Other hazards**

PBT: Not applicable

vPvB: Not applicable.

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## 3. Composition / information on ingredients

Substance: Sulbutiamine

CAS number: 3286-46-2

EC number: 221-937-3

Molecular formula: C<sub>32</sub>H<sub>46</sub>N<sub>8</sub>O<sub>6</sub>S<sub>2</sub>

Purity: typically ≥98%

Molecular formula and typical assay are consistent with the reviewed TCI SDS and PubChem records.

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## 4. First aid measures

### **General advice**

Remove affected person from exposure and ensure fresh air.

### **Inhalation**

Move person to fresh air and keep at rest in a position comfortable for breathing. Get medical advice if feeling unwell.

### **Skin contact**

Remove contaminated clothing. Rinse skin with water. Get medical advice if irritation occurs.

### **Eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Get medical advice if irritation persists.

### **Ingestion**

Rinse mouth. Get medical advice if feeling unwell.

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## 5. Firefighting measures

### **Suitable extinguishing media**

Water spray  
Dry chemical powder  
Carbon dioxide  
Foam.

### **Special hazards**

Combustion or heating may generate carbon dioxide, carbon monoxide, nitrogen oxides and sulfur oxides.

### **Protective equipment**

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus.

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## 6. Accidental release measures

### **Personal precautions**

Use personal protective equipment. Keep non-involved persons away from the spill area. Avoid dust dispersion.

### **Environmental precautions**

Prevent product from entering drains.

### **Cleanup methods**

Sweep up carefully into a suitable airtight container, taking care not to disperse dust. Dispose of collected material in accordance with applicable regulations.

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## 7. Handling and storage

### **Handling**

Handle in a well-ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Avoid contact with skin, eyes and clothing. Wash hands and face thoroughly after handling.

### **Storage**

Keep container tightly closed. Store in a refrigerator. Store under inert gas. Keep away from oxidizing agents. The reviewed SDS also describes the substance as **heat-sensitive** and **air-sensitive**.

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## 8. Exposure controls / personal protection

### **Exposure limits**

No data available / no occupational exposure limits established in the reviewed SDS.

### **Engineering controls**

Use local exhaust or other engineering controls where dust may be generated. Safety shower and eye bath recommended.

### **Personal protective equipment**

Eye protection: safety glasses

Gloves: protective gloves

Respiratory protection: dust respirator if needed

Protective clothing: lab coat or equivalent.

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## 9. Physical and chemical properties

Appearance: white to almost white crystal powder

Physical state: solid

Melting point: 137 °C (decomp.)

Solubility: soluble in methanol

Molecular formula: C<sub>32</sub>H<sub>46</sub>N<sub>8</sub>O<sub>6</sub>S<sub>2</sub>.

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## 10. Stability and reactivity

### **Chemical stability**

Stable under proper conditions.

### **Conditions to avoid**

Heat, air exposure, and incompatible storage conditions should be minimized; the reviewed SDS flags the material as heat-sensitive and air-sensitive.

### **Incompatible materials**

Oxidizing agents.

### **Hazardous decomposition**

Carbon dioxide, carbon monoxide, nitrogen oxides, sulfur oxides.

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## 11. Toxicological information

Available toxicology data in the reviewed TCI SDS include: oral rat LD50 **>5 g/kg**, subcutaneous rat LD50 **850 mg/kg**, intravenous rat LD50 **110 mg/kg**, and intraperitoneal rat LD50 **660 mg/kg**. The same SDS states there is **no CLP hazard classification** for the substance.

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## 12. Ecological information

Limited ecological data available.

Avoid release into the environment. The reviewed SDS reports no data for aquatic toxicity and notes no PBT/vPvB classification.

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## 13. Disposal considerations

Dispose of material in accordance with local regulations. Use licensed chemical waste disposal where applicable. The reviewed supplier SDS recommends disposal in line with local and national rules.

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## 14. Transport information

UN number: Not listed

ADR/RID: Not listed

IMDG/IMO: Not listed

ICAO/IATA: Not listed

The reviewed TCI SDS states the material does **not correspond to the UN dangerous goods classification standard** for these transport modes.

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## 15. Regulatory information

This product is supplied as a **chemical reference material for laboratory use**.

According to the reviewed TCI Europe SDS, Sulbutiamine is **not classified as hazardous according to Regulation (EC) No 1272/2008**, and it is **not listed as an SVHC** under REACH.

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## 16. Other information

This Safety Data Sheet provides information for safe handling in laboratory environments.

The product is supplied **for research and analytical use only**.

The information provided is based on reviewed public supplier safety documentation and chemical identity records and is believed to be accurate, but does not constitute a guarantee of product properties.