

# Dibenzyltoluene mixture of isomers: sc-235435



The Power to Question

## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Dibenzyltoluene mixture of isomers  
**Product Number:** sc-235435  
**Supplier:** Santa Cruz Biotechnology, Inc.  
2145 Delaware Avenue  
Santa Cruz, CA 95060  
800.457.3801 or 831.457.3800  
**Emergency:** ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 'Dibenzyltoluene', DBT, Dibenzyltoluene mixture of isomers  
Formula : C<sub>21</sub>H<sub>20</sub>  
Molecular Weight : 272.38 g/mol

| <i>CAS-No.</i>                      | <i>EC-No.</i> | <i>Index-No.</i> | <i>Concentration</i> |
|-------------------------------------|---------------|------------------|----------------------|
| <b>Toluene, dibenzyl derivative</b> |               |                  |                      |
| 29589-57-9                          | 249-706-2     | -                | -                    |

### 3. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

No known OSHA hazards

#### HMIS Classification

**Health Hazard:** 0

**Flammability:** 1

**Physical hazards:** 0

#### NFPA Rating

**Health Hazard:** 0

**Fire:** 1

**Reactivity Hazard:** 0

#### Potential Health Effects

**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.

### 4. FIRST AID MEASURES

#### If inhaled

If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Flush eyes with water as a precaution.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 5. FIRE-FIGHTING MEASURES

### Flammable properties

Flash point 200° C (392° F) – open cup

Ignition temperature 470° C (878° F)

### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

### Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions

Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### Methods for cleaning up

Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

### Handling

Normal measures for preventive fire protection.

### Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Respiratory protection

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Hand protection

For prolonged or repeated contact use protective gloves.

#### Eye protection

Safety glasses

#### Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

#### Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |   |                       |                   |
|---|---|-----------------------|-------------------|
| Form                                      | liquid                                  | pH                    | no data available |
| Density                                   | 1.043 g/cm <sup>3</sup>                 | Water solubility      | insoluble         |
| Flash point                               | 200 °C (392 °F) – open cup              | Melting point         | no data available |
| Ignition temperature                      | 470 °C (878 °F)                         | Lower explosion limit | no data available |
| Vapour pressure                           | 5 hPa (4 mmHg) at 200 °C (392 °F)       | Upper explosion limit | no data available |
|   | 1.29 hPa (0.97 mmHg) at 165 °C (329 °F) |                       |                   |
| Boiling point                             | 380 °C (716 °F) at 1,013 hPa (760 mmHg) |                       |                   |
| Partition coefficient:<br>n-octanol/water | log Pow: 6.5                            |                       |                   |

## **10. STABILITY AND REACTIVITY**

UN-Number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F

### **Storage stability**

Stable under recommended storage conditions.

### **Materials to avoid**

Strong oxidizing agents

### **Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. – Carbon oxides

### **Thermal decomposition**

> 380 °C (> 716 °F)

## **11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

LD50 Oral – rat – > 10,360 mg/kg

LD50 Inhalation – rat – 4 h – > 2,400 mg/m<sup>3</sup>

LD50 Dermal – rabbit – > 2,000 mg/kg

### **Irritation and corrosion**

Skin – rabbit – Mild skin irritation

Eyes – rabbit – Mild eye irritation

### **Sensitisation**

no data available

### **Chronic exposure**

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### **Potential Health Effects**

**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.

## **12. ECOLOGICAL INFORMATION**

### **Elimination information (persistence and degradability)**

Biodegradability Result: – Not readily biodegradable.

### **Ecotoxicity effects**

Toxicity to daphnia and other aquatic invertebrates.

EC50 – Daphnia magna (Water flea) – 1.6 mg/l – 24 h

### **Further information on ecology**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## **13. DISPOSAL CONSIDERATIONS**

### **Product**

Observe all federal, state, and local environmental regulations.

### **Contaminated packaging**

Dispose of as unused product.

## **14. TRANSPORT INFORMATION**

### **DOT (US)**

Not dangerous goods

**IMDG**

UN-Number: 3082 Class: 9 Packing group: III EMS-No: F-A, S-F

Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Toluene, dibenzyl derivative)

Marine pollutant: No

**IATA**

UN-Number: 3082 Class: 9 Packing group: III

Proper shipping name: Environmentally hazardous substance, liquid n.o.s. (Toluene, dibenzyl derivative)

**15. REGULATORY INFORMATION****OSHA Hazards**

No known OSHA hazards

**DSL Status**

This product contains the following components that are not on the Canadian DSL nor NDSL lists.

Toluene, dibenzyl derivative

CAS-No.

29589-57-9

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

No SARA Hazards

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

Toluene, dibenzyl derivative

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29589-57-9

**New Jersey Right To Know Components**

Toluene, dibenzyl derivative

CAS-No.

29589-57-9

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth, or any other reproductive defects.

**16. OTHER INFORMATION**

*The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.*

04/07/2011