



# TCI AMERICA

## SAFETY DATA SHEET

Revision number: 2  
Revision date: 10/06/2014

### 1. IDENTIFICATION

**Product name:** Diisobutyl Fumarate  
**Product code:** D3915

**Product use:** For laboratory research purposes.  
**Restrictions on use:** Not for drug or household use.

**Company:**  
TCI America  
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Portland, OR 97203 U.S.A.  
**Telephone:**  
+1-800-423-8616 / +1-503-283-1681  
**Fax:**  
+1-888-520-1075 / +1-503-283-1987  
**e-mail:**  
sales-US@TCIchemicals.com  
www.TCIchemicals.com

**Emergency telephone number:**  
**Chemical Emergencies:**  
TCI America (8:00am - 5:00pm) PST  
+1-503-286-7624  
**Transportation Emergencies:**  
Chemtrec 24-Hour  
+1-800-424-9300 (U.S.A.)  
+1-703-527-3887 (International)  
**Responsible department:**  
TCI America  
Environmental Health Safety and Security  
+1- 503-286-7624

### 2. HAZARD(S) IDENTIFICATION

**OSHA Haz Com: CFR 1910.1200:** Not classifiable

**Signal word:** None

**Hazard Statement(s):** None

**Pictogram(s) or Symbol(s):** None

**Precautionary Statement(s):**  
[Prevention] None  
[Response] None  
[Storage] None  
[Disposal] None

**Hazards not otherwise classified: [HNOC]** Causes mild skin irritation.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Substance/Mixture:** Substance  
**Components:** Diisobutyl Fumarate  
**Percent:** >98.0%(GC)  
**CAS Number:** 7283-69-4  
**Molecular Weight:** 228.29  
**Chemical Formula:** C<sub>12</sub>H<sub>20</sub>O<sub>4</sub>  
**Synonyms:** Fumaric Acid Diisobutyl Ester

### 4. FIRST-AID MEASURES

**Inhalation:** If a person breathes large amounts of this chemical, move the exposed person to fresh air at once.  
**Skin contact:** If a person feels unwell or symptoms of skin irritation appear, consult a physician.  
**Eye contact:** No information available.  
**Ingestion:** Not applicable.

**Symptoms/effects:**

**4. FIRST-AID MEASURES**

**Acute:** No data available  
**Delayed:** No data available

**Immediate medical attention:** No information available.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media:** Not available

**Specific hazards arising from the chemical**

**Hazardous combustion products:** These products include: Carbon oxides  
**Other specific hazards:** Closed containers may explode from heat of a fire.

**Special precautions for fire-fighters:**

Not available

**Special protective equipment for fire-fighters:**

Not available

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions:** Not available  
**Personal protective equipment:** Safety glasses.  
**Emergency procedures:** Not available.

**Methods and materials for containment and cleaning up:**

Not available

**Environmental precautions:**

Not available.

**7. HANDLING AND STORAGE**

**Precautions for safe handling:** Not available  
**Conditions for safe storage:** Keep container tightly closed in a dry and well-ventilated place.  
**Storage incompatibilities:** Store away from oxidizing agents

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure limits:** No data available

**Appropriate engineering controls:**

Not available.

**Personal protective equipment**

**Respiratory protection:** Not Available.  
**Hand protection:** Not Available.  
**Eye protection:** Not Available.  
**Skin and body protection:** Lab coat.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Physical state (20°C):** Liquid  
**Form:** Clear  
**Color:** Colorless - Almost colorless  
**Odor:** No data available  
**Odor threshold:** No data available

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Melting point/freezing point:</b>	8°C (46°F)	<b>pH:</b>	No data available
<b>Boiling point/range:</b>	122°C (252°F)/0.7kPa	<b>Vapor pressure:</b>	No data available
<b>Decomposition temperature:</b>	No data available	<b>Vapor density:</b>	No data available
<b>Relative density:</b>	0.98	<b>Dynamic Viscosity:</b>	No data available
<b>Kinematic Viscosity:</b>	No data available		
<b>Partition coefficient: n-octanol/water (log P<sub>ow</sub>)</b>	No data available	<b>Evaporation rate: (Butyl Acetate = 1)</b>	No data available
<b>Flash point:</b>	No data available	<b>Autoignition temperature:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available	<b>Flammability or explosive limits:</b>	
		<b>Lower:</b>	No data available
		<b>Upper:</b>	No data available

Solubility(ies):

**10. STABILITY AND REACTIVITY**

<b>Reactivity:</b>	Not Available.
<b>Chemical Stability:</b>	Stable under recommended storage conditions. (See Section 7)
<b>Possibility of Hazardous Reactions:</b>	No hazardous reactivity has been reported.
<b>Conditions to avoid:</b>	Avoid excessive heat and light.
<b>Incompatible materials:</b>	Oxidizing agents
<b>Hazardous Decomposition Products:</b>	No data available

**11. TOXICOLOGICAL INFORMATION**

RTECS Number: LT1565000

**Acute Toxicity:**

orl-rat LD50:8120 uL/kg

skn-rbt LD50:7490 uL/kg

**Skin corrosion/irritation:**

skn-rbt 10 mg/24H open MLD

**Serious eye damage/irritation:**

No data available

**Respiratory or skin sensitization:**

No data available

**Germ cell mutagenicity:**

No data available

**Carcinogenicity:**

No data available

**IARC:** No data available**NTP:** No data available**OSHA:** No data available**Reproductive toxicity:**

No data available

**Routes of Exposure:**

Inhalation, Eye contact, Ingestion, Skin contact.

**Symptoms related to exposure:**

Skin contact may result in redness, pain or dry skin.

**Potential Health Effects:**

Skin and eye contact may result in irritation.

**Target organ(s):**

No data available

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Fish:**

No data available

**Crustacea:**

No data available

**12. ECOLOGICAL INFORMATION**

<b>Algae:</b>	No data available
<b>Persistence and degradability:</b>	No data available
<b>Bioaccumulative potential (BCF):</b>	No data available
<b>Mobility in soil:</b>	No data available
<b>Partition coefficient:</b>	No data available
<b>n-octanol/water (log P<sub>ow</sub>)</b>	
<b>Soil adsorption (K<sub>oc</sub>):</b>	No data available
<b>Henry's Law:</b>	No data available
<b>constant (PaM<sup>3</sup>/mol)</b>	

**13. DISPOSAL CONSIDERATIONS**

<b>Disposal of product:</b>	Recycle to process if possible.
<b>Disposal of container:</b>	Dispose of as unused product.
<b>Other considerations:</b>	Observe all federal, state and local regulations when disposing of the substance.

**14. TRANSPORT INFORMATION**

<b>DOT (US)</b>	Non-hazardous for transportation.
<b>IATA</b>	Non-hazardous for transportation.
<b>IMDG</b>	Non-hazardous for transportation.

**15. REGULATORY INFORMATION****Toxic Substance Control Act (TSCA 8b.):**

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

- (i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.  
(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

**US Federal Regulations****CERCLA Hazardous substance and Reportable Quantity:**

<b>SARA 313:</b>	Not Listed
<b>SARA 302:</b>	Not Listed

**State Regulations****State Right-to-Know**

<b>Massachusetts</b>	Not Listed
<b>New Jersey</b>	Not Listed
<b>Pennsylvania</b>	Not Listed
<b>California Proposition 65:</b>	Not Listed

**Other Information****NFPA Rating:**

<b>Health:</b>	2
<b>Flammability:</b>	0
<b>Instability:</b>	0

**HMIS Classification:**

<b>Health:</b>	2
<b>Flammability:</b>	0
<b>Physical:</b>	0

**International Inventories**

<b>WHMIS hazard class:</b>	No data available.
<b>EC-No:</b>	230-706-6

**16. OTHER INFORMATION**

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**16. OTHER INFORMATION**

TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.