




# Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	The health risks of this compound have not been fully determined. Exposure may cause irritation of the skin, eyes, and respiratory system.	  

## Section I. Chemical Product and Company Identification

Chemical Name	Diethylene Glycol Dibenzoate		
Catalog Number	D1522	Supplier	TCI America 9211 N. Harbortgate St. Portland OR 1-800-423-8616
Synonym	Ethanol, 2,2'-oxybis-, 1,1'-dibenzoate (CA INDEX NAME)		
Chemical Formula	C <sub>18</sub> H <sub>18</sub> O <sub>5</sub>		
CAS Number	120-55-8	In case of Emergency Call <b>Chemtrec®</b> <b>(800) 424-9300 (U.S.)</b> <b>(703) 527-3887 (International)</b>	

## Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
Diethylene Glycol Dibenzoate	120-55-8	Min. 97.0 (GC)	Not available.	Rat LD <sub>50</sub> (oral) 2830 mg/kg Rabbit LD <sub>50</sub> (dermal) 20 mL/kg

## Section III. Hazards Identification

Acute Health Effects	No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound.
Chronic Health Effects	<b>CARCINOGENIC EFFECTS</b> : Not available. <b>MUTAGENIC EFFECTS</b> : Not available. <b>TERATOGENIC EFFECTS</b> : Not available. <b>DEVELOPMENTAL TOXICITY</b> : Not available. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.

## Section IV. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.
Ingestion	INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive.

## Section V. Fire and Explosion Data

Flammability	May be combustible at high temperature.	Auto-Ignition	Not available.
Flash Points	228°C (442.4°F).	Flammable Limits	Not available.
Combustion Products	These products are toxic carbon oxides (CO, CO <sub>2</sub> ).		
Fire Hazards	Not available.		
Explosion Hazards	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.		
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet. Consult with local fire authorities before attempting large scale fire-fighting operations.		

**Section VI. Accidental Release Measures**

Spill Cleanup Instructions	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning the spill by rinsing any contaminated surfaces with copious amounts of water. Consult federal, state, and/or local authorities for assistance on disposal.
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**Section VII. Handling and Storage**

Handling and Storage Information	Keep away from heat. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. Do not breathe gas/fumes/ vapor/spray.
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**Section VIII. Exposure Controls/Personal Protection**

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash station and safety shower is proximal to the work-station location.
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Personal Protection	Splash goggles. Lab coat. Vapor respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
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Exposure Limits	Not available.
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**Section IX. Physical and Chemical Properties**

Physical state @ 20°C	Liquid. (Clear, colorless.)	Solubility	Not available.
Specific Gravity	1.18 (water=1)		
Molecular Weight	314.33	Partition Coefficient	Not available.
Boiling Point	235 to 237°C (455 to 458.6°F) @ 7 mmHg	Vapor Pressure	Not available.
Melting Point	13°C (55.4°F) (freezing point)	Vapor Density	Not available.
Refractive Index	1.5440 - 1.5470	Volatility	Not available.
Critical Temperature	Not available.	Odor	Not available.
Viscosity	Not available.	Taste	Not available.

**Section X. Stability and Reactivity Data**

Stability	This material is stable if stored under proper conditions. (See Section VII for instructions)
Conditions of Instability	Avoid excessive heat and light.
Incompatibilities	Reactive with strong oxidizing agents.

**Section XI. Toxicological Information**

RTECS Number	ID6650000
Routes of Exposure	Eye Contact. Ingestion. Inhalation.
Toxicity Data	Rat LD <sub>50</sub> (oral) 2830 mg/kg Rabbit LD <sub>50</sub> (dermal) 20 mL/kg
Chronic Toxic Effects	<b>CARCINOGENIC EFFECTS</b> : Not available. <b>MUTAGENIC EFFECTS</b> : Not available. <b>TERATOGENIC EFFECTS</b> : Not available. <b>DEVELOPMENTAL TOXICITY</b> : Not available. Repeated or prolonged exposure to this compound is not known to aggravate existing medical conditions.
Acute Toxic Effects	No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Skin and eye contact may result in irritation. May be harmful if inhaled or ingested. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound.

**Section XII. Ecological Information**

Ecotoxicity	Not available.
Environmental Fate	Diethylene glycol dibenzoate's production and use as a plasticizer may result in its release to the environment through various waste streams. If released to soil, diethylene glycol dibenzoate will have low mobility based on an estimated Koc value of 540. Volatilization of diethylene glycol dibenzoate is not expected to be important from moist soil surfaces given an estimated Henry's Law constant of 3X10 <sup>-12</sup> atm-cu m/mole. Volatilization from dry soil surfaces is not expected based on an estimated vapor pressure of 0.09 mm Hg. Insufficient data are available to determine the rate or importance of biodegradation of diethylene glycol dibenzoate in soil or water. If released to water, diethylene glycol dibenzoate is expected to adsorb to suspended solids and sediment based on an estimated Koc value of 540. Diethylene glycol dibenzoate will be essentially non-volatile from water surfaces based on an estimated Henry's Law constant of 3X10 <sup>-12</sup> atm-cu m/mole. An estimated BCF value of 120 suggests that bioconcentration in aquatic organisms is high. Diethylene glycol dibenzoate has estimated base-catalyzed hydrolysis half-lives of 49 days at a pH of 8 and 1.3 years at a pH of 7. If released to the atmosphere, diethylene glycol dibenzoate, which has an estimated vapor pressure of 0.09 mm Hg, will exist solely as a vapor. Vapor-phase

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diethylene glycol dibenzoate is degraded in the atmosphere by reaction with photochemically produced hydroxyl radicals with an estimated half-life of about 20 hours. Particulate-phase diethylene glycol dibenzoate may be physically removed from the air by wet and dry deposition. Occupational exposure may be through inhalation and dermal contact with this compound.

### Section XIII. Disposal Considerations

#### Waste Disposal

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

### Section XIV. Transport Information

#### DOT Classification

Not a DOT controlled material (United States).

#### PIN Number

Not applicable.

#### Proper Shipping Name

Not applicable.

#### Packing Group (PG)

Not applicable.

#### DOT Pictograms



### Section XV. Other Regulatory Information and Pictograms

#### TSCA Chemical Inventory (EPA)

This compound is **ON** the EPA Toxic Substances Control Act (TSCA) inventory list.

#### WHMIS Classification (Canada)

On DSL.

#### EINECS Number (EEC)

204-407-6

#### EEC Risk Statements

Not available.

#### Japanese Regulatory Data

ENCS No. 3-1390

### Section XVI. Other Information

#### Version 1.0

Validated on 9/16/2008.

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#### Notice to Reader

TCI laboratory 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 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 MSDS sheets 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 MSDS sheets 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, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.