

# Designer Molecules, Inc.

## Safety Data Sheet

Product: EC-312  
MSDS ID: R1227

Revised Date: 06/11/15  
Replaces Date: 03/11/15

### 1. General Information

Trade Name: EC-312  
Product Code: R1227  
Product Type: Phenyl Ester Epoxy Curative  
Company: Designer Molecules, Inc.  
10080 Willow Creek Rd.  
San Diego, CA 92131  
Telephone: 858-348-1122

Emergency phone number (spill, leak, fire, exposure or accident):  
US Domestic 800-424-9300 (CHEMTREC)  
International +1 703-527-3887

### 2. Hazards Identification

#### EMERGENCY OVERVIEW:

##### OSHA Hazards:

Skin sensitizer, Irritant

##### GHS Classification:

Skin Irritation (Category 2)

Eye Irritant (Category 2A)

Skin Sensitization (Category 1)

Specific Target Organ Toxicity – single exposure (Category 3)

##### GHS Label Elements, including precautionary statements:



Signal Word: **Warning**

H315: Causes skin irritation.

H317: May cause an allergic skin reaction.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

P261: Avoid breathing dust/gume/gas/mist/vapors/spray.

P280: Wear protective gloves.

P305+P338+P351 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

# Designer Molecules, Inc.

## Safety Data Sheet

Product: EC-312  
MSDS ID: R1227

Revised Date: 06/11/15  
Replaces Date: 03/11/15

### 3. Composition/ Information On Ingredients

**Synonyms:** EC-312  
Phenyl ester epoxy curative of Bisphenol A

COMPONENT	CAS#	CONCENTRATION
Bisphenol A Diacetate	Not registered	> 95%

### 4. First Aid Measures

**SWALLOWING:** Do not induce vomiting. Wash out mouth with water provided the person is fully conscious. Get immediate medical attention.

**SKIN CONTACT:** Wash area with soap and water. Remove contaminated clothing and shoes. Wash or clean before reuse.

**INHALATION:** Remove person to fresh air. If breathing has stopped, perform artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**EYE CONTACT:** Flush with water for 15 minutes. Get immediate medical attention.

**NOTES TO PHYSICIAN:**

**There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.**

### 5. Fire and Explosion Hazard Data

**FLASH POINT (method):** >392°F / >200°C, (closed cup)  
**AUTOIGNITION:** Not determined  
**EXTINGUISHER METHOD:** Water spray, CO<sub>2</sub>, foam, dry chemical  
**SPECIAL FIRE-FIGHTING PROCEDURES:**

Fire fighters should wear NIOSH/MSHA approved pressure demand self-contained breathing apparatus. Decontaminate or discard any clothing that may contain chemical residues.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:**  
None.

### 6. Accidental Release Measures

**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:**

Promptly absorb spill. Remove sources of ignition. Cover drains to prevent entry into waterways. Wear personal protective equipment (clothing and gloves) when handling spilled materials.

**PERSONAL PRECAUTIONS:**

Wear suitable NIOSH-approved protective equipment.

**ENVIRONMENTAL PRECAUTIONS:**

May be toxic to aquatic life. Avoid runoff to waterways and sewers.

### 7. Handling and Storage

**STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:**

For small amounts, wipe off with damp sponge. For large amounts, absorb on sand or vermiculite. Wipe off and dispose of into proper waste disposal containers.

# Designer Molecules, Inc.

## Safety Data Sheet

Product: EC-312  
MSDS ID: R1227

Revised Date: 06/11/15  
Replaces Date: 03/11/15

### WASTE DISPOSAL METHODS:

Dissolve or mix material with proper solvent and incinerate.

### PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Material is generally stable. Keep away from open flames. Store at room temperature in a cool dry place

### OTHER PRECAUTIONS AND/OR SPECIAL HAZARDS:

None.

## 8. Exposure Controls and Personal Protection Measures

### PERSONAL PROTECTION:

Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hands: Protective gloves are recommended (4H, butyl, neoprene, nitrile, or PVC-coated).

Eyes: Safety glasses, goggles, or face shields are required.

Skin: Chemical-resistant clothing.

### OTHER PROTECTIVE EQUIPMENT:

Eye bath.

Safety shower.

### ENGINEERING CONTROLS:

Ventilation: This product should be stored in a closed environment to prevent any vapors from escaping storage containers, and to prevent moisture contamination. General mechanical room ventilation is satisfactory. Local ventilation is required at points where vapors are likely to be released into workplace air.

### EXPOSURE LIMITS:

Component	Type	Value	Remarks
Modified Bis A	TWA (skin) OSHA	- ppm	None established
	STEL (skin) ACGIH	- ppm	None established
	TWA (skin) ACGIH	- ppm	None established

## 9. Physical / Chemical Characteristics

### APPEARANCE:

Physical State: Solid (Powder)  
Color: White to light yellow  
Odor: Mild vinegar odor

### OTHER PROPERTIES:

Boiling Point: Not determined  
Melting Point: 91 – 94°C  
pH: Not applicable  
Specific Gravity (H<sub>2</sub>O=1): Not determined  
Vapor Pressure: Not determined  
Vapor Density (Air-1): Heavier than air.  
Solubility in water: Not determined  
Evaporation rate (BuAc=1): <1  
Avg. Molecular Weight: Not established  
Percent volatile (weight): Not determined  
Percent volatile (volume): Not determined

# Designer Molecules, Inc.

## Safety Data Sheet

Product: EC-312  
MSDS ID: R1227

Revised Date: 06/11/15  
Replaces Date: 03/11/15

Volatile organic content: Not determined

### 10. Reactivity Hazard Data

**STABILITY:** Stable  
**CONDITIONS TO AVOID:** Open flames, high temperatures  
**INCOMPATIBLE MATERIALS:** Strong acids or bases; strong oxidizing agents.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO)  
**HAZARDOUS POLYMERIZATION:** Will not occur  
**CONDITIONS TO AVOID:** Open flames; strong oxidizing agents

### 11. Toxicological Information

**ROUTE OF EXPOSURE:**  
Inhalation: Material is irritating to mucous membranes and upper respiratory tract.  
Multiple Routes: Causes eye and skin irritation. May be harmful by inhalation, ingestion, or skin absorption.

**SIGNS AND SYMPTOMS OF EXPOSURE:**  
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### 12. Ecological Information

**ELIMINATION (persistence and degradability):**  
**Biodegradability:** Not determined

**AQUATIC TOXICITY:**  
**Acute toxicity to fish:** Not determined  
**Acute toxicity to plants:** Not determined  
**Microorganisms:** Not determined.

### 13. Disposal Considerations

**WASTE DISPOSAL METHOD:** Disposal should be in accordance with local, state or national legislation.  
**EMPTY CONTAINER WARNINGS:** Empty containers may contain product residue, follow MSDS and label warnings even after they have been emptied.

### 14. Transport Information

Not a hazardous material for transportation.

**US DOT REGULATIONS:**  
**NON-BULK** Proper Shipping Name: Not regulated  
**BULK** Proper Shipping Name: Not regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized safety officer. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

# Designer Molecules, Inc.


## Safety Data Sheet

Product: EC-312  
MSDS ID: R1227

Revised Date: 06/11/15  
Replaces Date: 03/11/15

### 15. Regulatory Information

#### EU ADDITIONAL CLASSIFICATION:

Symbol of Danger:	Xi	
Indication of Danger:	Irritant	
R Phrases:	36/37/38	
Risk Statements:	Irritating to eyes, respiratory system and skin.	
S Phrases:	26 - 36	
Safety Statements:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.	

#### US CLASSIFICATION AND LABEL TEXT:

Indication of Danger:	Irritant
Risk Statements:	Irritating to eyes, respiratory system and skin.
Safety Statements:	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

**CA PROPOSITION 65:** This material does not contain any chemicals known to the State of California to cause cancer or reproductive defects.

**TSCA INVENTORY STATUS:** Not registered. For R&D use by trained individuals.

**TSCA 12(b) EXPORT NOTIFICATION:** This material does not contain 12(b) regulated chemicals.

**SARA 311/312 HAZARD CLASS:** There are no known hazards associated with this material.

**EINECS IDENTIFICATION:** This material is not listed on EINECS.

<b>HMIS RATINGS:</b>	Health:	<u>2</u>
	Flammability:	<u>1</u>
	Reactivity:	<u>0</u>
	Personal Protection:	<u>B</u>

### 16. Other Information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgments of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user. While that data contained herein is factual, it should not be taken as warranty or representation for which the company assumes legal responsibility. It is offered solely for your consideration, investigation and verification. Any use of this data and information must be determined by the user to be in accordance with applicable federal, state and local laws and regulations.