Product: EC-1074 Revised Date: 06/10/15 MSDS ID: R1149 Replaces Date:03/19/09

1. General Information

Trade Name: EC-1074 Product Code: R1149

Product Type: Phenol 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:

Physical state: Glassy solid HMIS Rating:

Color:Clear brownHealth:2Odor:MinimalFlammability:0

Physical Hazard: 0

Personal Protection: See Section 8

CAUTION! MAY CAUSE RESPIRATORY TRACT IRRITATION. CAUSES EYE AND SKIN

IRRITATION. HARMFUL IF SWALLOWED OR INHALED.

Relevant routes of exposure: Eye contact, Inhalation, Skin Contact

POTENTIAL HEALTH EFFECTS

Inhalation: May cause irritation of the mucous membrane and upper respiratory tract.

Eye: Causes eye irritation.

Skin: Brief contact may cause irritation with itching and local redness.

Ingestion: Moderately toxic. May cause abdominal discomfort, with nausea, vomiting and

diarrhea.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Target Organs: No data found

3. Composition Information

COMPONENT CAS# CONCENTRATION

Fatty acids, C18-unsatd., dimers, di-Me esters, hydrogenated, bis[4-hydroxy-γ-(4-hydroxyphenyl)-γ-methylbenzenebutanoates] 926657-64-9 ~ 100%

Date Printed: 9/24/2015 Page 1 of 6

Product: EC-1074 MSDS ID: R1149 Revised Date: 06/10/15 Replaces Date: 03/19/09

Date Printed: 9/24/2015 Page 2 of 6

Product: EC-1074 Revised Date: 06/10/15 MSDS ID: R1149 Replaces Date:03/19/09

4. First Aid Measures

INGESTION: Do not induce vomiting. Give person large amounts of water. 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): > 260°C (500°F) Closed cup) **EXTINGUISHER METHOD:** Foam, CO₂, 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:

Do not enter fire area without proper protection. See Section 10, Reactivity Data, for decomposition products possible. Fight fire from safe distance and protected location. Heat/impurities may increase temperature/build pressure/rupture closed containers, spreading fire, increasing risk of burns/injuries. Water may be ineffective in firefighting due to low solubility. Use water spray/fog for cooling. Pressure relief system may plug with solids, increasing risk of overpressure.

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 protective equipment.

ENVIRONMENTAL PRECAUTIONS:

This product is essentially insoluble in water. This material is resistant to rapid biodegradation. May be toxic to aquatic life. Avoid runoff to waterways and sewers.

7. Handling and Storage

HANDLING: Avoid contact with eyes.

Keep container closed.

Use with adequate ventilation. Wash thoroughly after handling.

VENTILATION: General (mechanical) room ventilation is expected to be satisfactory for use at room

temperature. Special, local ventilation is recommended at points where vapors generated

at high temperatures may be vented to the workplace air.

STORAGE: Keep containers tightly closed. Store in a cool, dry area away from incompatible

substances.

Date Printed: 9/24/2015 Page 3 of 6

Product: EC-1074 Revised Date: 06/10/15 MSDS ID: R1149 Replaces Date:03/19/09

8. Exposure Controls and Personal Protection Measures

ENGINEERING CONTROLS:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below permissible exposure limits.

EXPOSURE LIMITS:

Chemical Name	ACGIH	NIOSH	OSHA- Final PELs
Fatty acids, C18-unsatd.,	none listed	none listed	none listed
dimers, di-Me esters,			
hydrogenated, bis[4-			
hydroxy-γ-(4-			
hydroxyphenyl)-γ-			
methylbenzenebutanoates]]			

PERSONAL PROTECTIVE EQUIPMENT RESPIRATORY PROTECTION (SPECIFY TYPE):

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

SKIN:

Wear appropriate protective gloves and clothing to prevent skin exposure.

CLOTHING:

Wear appropriate protective clothing to prevent skin exposure.

EYE PROTECTION:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

9. Physical / Chemical Characteristics

APPEARANCE:

Physical State: Tacky semi-solid
Color: Clear to light yellow
Odor: None or slight

OTHER PROPERTIES:

Boiling Point:

Melting Point:

Not determined.

Not determined.

Not currently available

Density (g/CC): 1.019

Vapor Pressure (mmHg): Not determined Vapor Density (air=1): Not determined

Volatile Organic Compounds: ≈ 0%

Solubility in water: Not determined Evaporation rate: Not determined

Percent volatile (weight): ≈ 0%

Decomposition Temperature: Not determined Molecular Formula: ~C₇₀H₁₀₄O₄ ~1,073.6

Date Printed: 9/24/2015 Page 4 of 6

Product: EC-1074 Revised Date: 06/10/15 MSDS ID: R1149 Replaces Date:03/19/09

10. Reactivity Hazard Data

STABILITY:

Stable under normal temperatures and pressures.

INCOMPATIBILITY (MATERIALS TO AVOID):

Strong oxidizing agents, strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon monoxide / carbon dioxide.

HAZARDOUS POLYMERIZATION:

Has not been reported.

CONDITIONS TO AVOID:

11. Toxicological Information

Toxicological testing has not been performed on this product.

CARCINOGEN STATUS: CAS # 926657-64-9: not listed by ACGIH, IARC, NTP or CA Prop 65

EPIDEMIOLOGY:
TERATOGENICITY:
REPRODUCTIVE EFFECTS:
MUTAGENICITY:
No information found

12. Ecological Information

ECOTOXICITY: No data available. No information available.

ENVIRONMENTAL: No data available **PHYSICAL:** No data available

OTHER: None

13. Disposal Considerations

WASTE DISPOSAL METHOD: Dispose with material in accordance with all local, state and federal regulations with the preferred method being destructive incineration at a permitted facility. Do not use water for equipment/container cleaning. Empty containers should be recycled or disposed of through an approved waste management facility.

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.

Date Printed: 9/24/2015 Page 5 of 6

Product: EC-1074 Revised Date: 06/10/15 MSDS ID: R1149 Replaces Date:03/19/09

15. Regulatory Information

TSCA 8(b) Inventory Status: Material is manufactured under a Low Volume Exemption (LVE)

in compliance with Section 5(h)(4) of the Toxic Substances

Control Act, 15 U.S.C

TSCA 12(b) Export Notification:

40 CFR PT. 355 EHS:

40 CFR 372.65 (SAFA313):

California Proposition 65:

R Phrases:

None

R 36, 38, 43

R 36/37/38 Irritating to eyes, respiratory system and skin

S Phrases: S 26, 28 (soap and water), 36

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.

Date Printed: 9/24/2015 Page 6 of 6