

Order Number

Customer Number

1. Identification of the substance/preparation and of the company/undertaking

Product name : Calyculin A, *Discodermia calyx* **Catalog #** : 208851
Chemical formula : C₅₀H₈₁N₄O₁₅P **Supplier** : EMD Biosciences, Inc.
 10394 Pacific Center Court
 San Diego, CA 92121
 (858)450-5558/(800)854-3417
 FAX: (858)453-3552
Synonym : Not available.

Emergency telephone number : Call Chemtrec®
 (800)424-9300 (within U.S.A.)
 (703)527-3887 (outside U.S.A.)

2. Composition / information on ingredients

Substance/Preparation : Substance

Chemical name*	CAS No.	EC Number	Symbol	R-Phrases
Calyculin A, <i>Discodermia calyx</i>	101932-71-2	Not available.	T	R24/25, R38

3. Hazards identification

Physical/chemical hazards : Not applicable.
Human health hazards : CAUTION!
 MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
 MAY CAUSE SKIN IRRITATION.
 MAY CAUSE DAMAGE TO THE FOLLOWING ORGANS: HEART, GASTROINTESTINAL TRACT, MUSCLE TISSUE.

4. First-aid measures

First-Aid measures

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin Contact : In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
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.
Effects and symptoms
Ingestion : Hazardous in case of ingestion.
Skin Contact : Hazardous in case of skin contact (irritant, permeator). Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

5. Fire-fighting measures

Flammability of the Product : May be combustible at high temperature.
Extinguishing Media
Suitable : SMALL FIRE: Use DRY chemical powder.
 LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Hazardous thermal (de)composition products : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...), phosphates.
Special fire-fighting procedures : Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Protection of fire-fighters : Be sure to use an approved/certified respirator or equivalent.

6. Accidental release measures

- Personal precautions** : Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Small Spill and Leak** : Use appropriate tools to put the spilled solid in a convenient waste disposal container.
- Large Spill and Leak** : Use a shovel to put the material into a convenient waste disposal container.

7. Handling and storage

- Handling** : Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Avoid contact with skin. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label.
- Storage** : Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above -20°C (-4°F).
- Packaging materials**
- Recommended use** : Use original container.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
Calyculin A, <i>Discodermia calyx</i>	Not available.

Personal protective equipment

- Respiratory system** : Dust respirator. Be sure to use an approved/certified respirator or equivalent.
- Skin and body** : Lab coat.
- Hands** : Gloves.
- Eyes** : Safety glasses.
- Protective Clothing (Pictograms)** :



9. Physical and chemical properties

- Physical state** : Solid.
- Color** : Not available.
- Molecular Weight** : 1009.2 g/mole
- Melting Point** : 247 to 249°C (476.6 to 480.2°F)
- Solubility** : Not available.
- Flash point** : Not available.
- Explosive properties** : 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.

10. Stability and reactivity

- Stability** : The product is stable.
- Conditions to avoid** : Sensitive to light.
- Hazardous Decomposition Products** : These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...), phosphates.

11. Toxicological information

RTECS # : N/A

Local effects

Skin irritation : Hazardous in case of skin contact (irritant).

Acute toxicity : LD50: Not available.
LC50: Not available.

Chronic toxicity : Repeated or prolonged exposure is not known to aggravate medical condition.

Other Toxic Effects on Humans : Toxic for humans or animal life.
Hazardous in case of skin contact (irritant, permeator), of ingestion.
Not available.

To the best of our knowledge, the toxicological properties of this product have not been thoroughly investigated.

Carcinogenic effects : Not available.

Mutagenic effects : Not available.

Reproduction toxicity : Not available.

Teratogenic effects : Not available.

12. Ecological information

Ecotoxicity : Not available.

Toxicity of the Products of Biodegradation : The products of degradation are less toxic than the product itself.

13. Disposal considerations

Methods of disposal; Waste of residues; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport information

International transport regulations

UN number : UN2811

Land - Road/Railway

Proper shipping name : Toxic solid, organic, n.o.s.*

ADR/RID Class : CLASS 6.1: Toxic substance.

Packing Group : II

ADR/RID label :



Sea

Proper shipping name : Toxic solid, organic, n.o.s.*

IMDG Class : CLASS 6.1: Toxic substance.

Packing Group : II

IMDG label :



Air

Proper shipping name : Toxic solid, organic, n.o.s.*

UN/ID Number : UN2811

IATA-DGR Class : CLASS 6.1: Toxic substance.

Packing Group : II

IATA label :



Special Provisions for Transport : Not available.

15. Regulatory information

EU Regulations

Hazard symbol(s)



Classification

: Toxic

Risk Phrases

: R24/25- Toxic in contact with skin and if swallowed.
R38- Irritating to skin.

Safety Phrases

: S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contains

: - Calyculin A, *Discodermia calyx*

U.S. Federal Regulations

: TSCA: No products were found.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
SARA 313 toxic chemical notification and release reporting: No products were found.
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.
Clean air act (CAA) 112 accidental release prevention: No products were found.
Clean air act (CAA) 112 regulated flammable substances: No products were found.
Clean air act (CAA) 112 regulated toxic substances: No products were found.

HCS Classification

: CLASS: Toxic.
CLASS: Irritating substance.
CLASS: Target organ effects.

State Regulations

:

WHMIS (Canada)

: Not controlled under WHMIS (Canada).
No products were found.

16. Other information

**Hazardous Material
Information System
(U.S.A.)**

Health	* 2
Fire Hazard	1
Reactivity	0
Personal Protection	E

**National Fire
Protection Association
(U.S.A.)**



Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, 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 materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. **This product is intended for research use only.***

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