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**MATERIAL SAFETY DATA SHEET**  
**Cannabidiol (DEA Schedule I Regulated**  
**Compound)**

Cayman Chemical Company  
1180 E. Ellsworth Rd.  
Ann Arbor, MI 48108

Printed: 04/20/2010  
Revision: 04/20/2010  
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Date Created: 08/23/1999

### 1. Product and Company Identification

**Product Code:** 90080  
**Product Name:** Cannabidiol (DEA Schedule I Regulated Compound)  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335  
**Synonyms:** 2-[1R-3-methyl-6R-(1-methylethenyl)-2-cyclohexen-1-yl]-5-pentyl-1,3-benzenediol;

### 2. Hazards Identification

**Emergency Overview:** Avoid contact and inhalation.  
Target Organ(s): Immune system, reproductive system.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (Acute and Chronic):** Material may be irritating to the mucous membranes and upper respiratory tract.  
May be harmful by inhalation, ingestion, or skin absorption.  
May cause eye, skin, or respiratory system irritation.  
The toxicological properties of this product have not been fully evaluated.  
**Signs and Symptoms Of Exposure:** No data available.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. Cannabidiol	13956-29-1	100.0 %	NA	VH1600000

### 4. First Aid Measures

**Emergency and First Aid Procedures:** If inhaled, remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.  
If swallowed, wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.  
In case of contact with eyes, hold eyelids apart and flush eyes with plenty of water for at least 20 minutes. Have eyes examined and tested by medical personnel.  
In case of skin contact, immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

### 5. Fire Fighting Measures

**Flash Pt:** No data.  
**Explosive Limits:** LEL: No data. UEL: No data.  
**Special Fire Fighting Procedures:** As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.  
**Unusual Fire and Explosion Hazards:** No data available.  
**Hazardous Combustion Products:** No data available.  
**Suitable Extinguishing Media:** Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.  
Use water spray to cool fire-exposed containers.  
**Unsuitable Extinguishing Media:** A solid water stream may be inefficient.

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**6. Accidental Release Measures**

**Steps To Be Taken In Case Material Is Released Or Spilled:** Avoid release into the environment.  
Avoid raising and breathing dust, and provide adequate ventilation.  
As conditions warrant, wear a NIOSH approved self-contained breathing apparatus, or respirator, and appropriate personal protection (rubber boots, safety goggles, and heavy rubber gloves).  
Transfer to a proper chemical waste container for disposal.

**7. Handling and Storage**

**Hazard Label Information:** Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation.  
Wash thoroughly after handling

**Precautions To Be Taken in Handling:** Avoid breathing (dust, vapor, mist, gas).  
Avoid prolonged or repeated exposure.

**Precautions To Be Taken in Storing:** Keep tightly closed.  
Store at correct temperature.

**Other Precautions:** Light sensitive.

**8. Exposure Controls/Personal Protection**

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Cannabidiol	13956-29-1	No data.	No data.	No data.

**Protective Equipment Summary - Hazard Label Information:** Compatible chemical-resistant gloves Eye wash station in work area Lab coat Safety glasses Safety shower in work area Vent Hood

**Respiratory Equipment (Specify Type):** NIOSH approved respirator, as conditions warrant.

**Eye Protection:** Safety glasses

**Protective Gloves:** Compatible chemical-resistant gloves

**Other Protective Clothing:** Lab coat

**Ventilation:** Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

**Work/Hygienic/Maintenance Practices:** Do not take internally.  
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.  
Wash thoroughly after handling.

**9. Physical and Chemical Properties**

**Physical States:** [ ] Gas [ ] Liquid [ X ] Solid

**Melting Point:** No data.

**Boiling Point:** No data.

**Autoignition Pt:** No data.

**Flash Pt:** No data.

**Explosive Limits:** LEL: No data. UEL: No data.

**Specific Gravity (Water = 1):** No data.

**Bulk density:** No data.

**Vapor Pressure (vs. Air or mm Hg):** No data.

**Vapor Density (vs. Air = 1):** No data.

**Evaporation Rate (vs Butyl Acetate=1):** No data.

**Solubility in Water:** No data.

**Solubility Notes:** ~250 µg/ml in 1:3 DMSO:PBS (pH 7.2); ~36 mg/ml in EtOH; ~60 mg/ml in DMSO; ~50 mg/ml in DMF;

**Percent Volatile:** No data.

**Heat Value:** No data.

**Particle Size:** No data.

**Corrosion Rate:** No data.

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**Formula:** C21H30O2  
**Molecular Weight:** 314.50  
**pH:** No data.  
**Appearance and Odor:** A crystalline solid

**10. Stability and Reactivity**

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** light  
**Incompatibility - Materials To Avoid:** strong oxidizing agents  
**Hazardous Decomposition Or Byproducts:** carbon dioxide  
 carbon monoxide  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Reactions:** No data available.

**11. Toxicological Information**

**Chronic Toxicological Effects:** The toxicological effects of this product have not been thoroughly studied.  
 Cannabidiol - Toxicity Data: Intravenous LD50 (mouse): 50 mg/kg;  
 Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.  
 See actual entry in RTECS for complete information.  
 Cannabidiol RTECS Number: VH1600000  
**Carcinogenicity/Other Information:** No data available.  
**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

**12. Ecological Information**

**Ecological Information:** Avoid release into the environment.  
 Runoff from fire control or dilution water may cause pollution.

**13. Disposal Considerations**

**Waste Disposal Method:** Dispose in accordance with local, state, and federal regulations.

**14. Transport Information**

**LAND TRANSPORT (US DOT)**  
**DOT Proper Shipping Name** Not dangerous goods.  
**LAND TRANSPORT (European ADR/RID)**  
**ADR/RID Proper Shipping Name** Not dangerous goods.  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Proper Shipping Name** Not dangerous goods.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

**15. Regulatory Information**

**European Community Hazard Symbol codes**  
 No data available.  
**European Community Risk and Safety Phrases**  
 S24/25 - Avoid contact with skin and eyes.  
 S37/39 - Wear suitable gloves and eye/face protection.  
**US EPA SARA Title III**

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Cannabidiol	13956-29-1	No	No	No	No

**US EPA CAA, CWA, TSCA**

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. Cannabidiol	13956-29-1	HAP, ODC ( )	No	No	

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**16. Other Information**

**Company Policy or Disclaimer**

For research use only, not for human or veterinary clinical use.

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