

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



1. Identification of the Substance/Mixture and of the Company/Undertaking

Product Code: 11294

Product Name: Aflatoxin B2

Synonyms: 2,3,6aR,8,9,9aS-hexahydro-4-methoxy-cyclopenta[c]furo[3',2':4,5]furo[2,3-h][1]benzopyran-1,11-dione; Dihydroaflatoxin B1;

Intended Use: For research use only, not for human or veterinary use.

Manufacturer Information

Company Name: Cayman Chemical Company

Emergency Contact: CHEMTREC Within USA and Canada: +1 (800)424-9300

Alternate Emergency Contact: CHEMTREC Outside USA and Canada: +1 (703)527-3887

Information: Cayman Chemical Company +1 (734)971-3335

Web site address: www.caymanchem.com

2. Hazards Identification

GHS Classification	Placard	Key word	GHS Hazard
Acute Toxicity: Oral, Category 2	Skull and crossbones	Danger	Fatal if swallowed
Acute Toxicity: Skin, Category 2	Skull and crossbones	Danger	Fatal in contact with skin
Acute Toxicity: Inhalation, Category 2	Skull and crossbones	Danger	Fatal if inhaled
Carcinogenicity, Category 1B	Health hazard	Danger	May cause cancer

GHS Hazard Phrases:

H300: Fatal if swallowed.
 H310: Fatal in contact with skin
 H330: Fatal if inhaled.
 H350: May cause cancer.

GHS Precaution Phrases:

P264: Wash hands thoroughly after handling.
 P262: Do not get in eyes, on skin, or on clothing.
 P280: Wear protective gloves/clothing and eye/face protection as specified by the manufacturer/supplier or the competent authority.
 P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P284: Wear respiratory protection. as specified by the manufacturer/supplier or the competent authority.
 P201: Obtain special instructions before use.
 P202: Do not handle until all safety precautions have been read and understood.
 P281: Use personal protective equipment as required.

GHS Response Phrases:

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
 P330: Rinse mouth.
 P361: Remove/Take off immediately all contaminated clothing.
 P302+350: IF ON SKIN: Gently wash with plenty of soap and water.
 P310: Immediately call a POISON CENTER or doctor/physician.
 P363: Wash contaminated clothing before reuse.
 P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 P308+313: IF exposed or concerned: Get medical attention/advice.

Steps To Be Taken In Case Material Is Released Or Spilled: Contain spill and collect, as appropriate.
Transfer to a chemical waste container for disposal in accordance with local regulations.

7. Handling and Storage

Precautions To Be Taken in Handling: Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid prolonged or repeated exposure.

Precautions To Be Taken in Storing: Keep container tightly closed.
Store in accordance with information listed on the product insert.

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

8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Aflatoxin B2	7220-81-7	No data.	No data.	No data.
Hazardous Components (Chemical Name)	CAS #	Britain EH40	France VL	Europe
1. Aflatoxin B2	7220-81-7	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

Engineering Controls (Ventilation etc.): Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Eye Protection: Safety glasses

Protective Gloves: Compatible chemical-resistant gloves

Other Protective Clothing: Lab coat

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

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

Environmental Exposure Controls: No data available.

9. Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Physical States: Gas Liquid Solid

Appearance and Odor: A crystalline solid

Melting Point: No data.

Boiling Point: No data.

Flash Pt: No data.

Evaporation Rate: No data.

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

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

Specific Gravity (Water = 1): No data.

Solubility in Water: No data.

Solubility Notes: ~0.5 mg/ml in 1:1 DMF:PBS (pH 7.2); ~12 mg/ml in DMSO*; ~20 mg/ml in DMF;
*DMSO has the potential to carry toxic materials or materials of unknown toxicity into the body.
DMSO is readily absorbed through skin.

Autoignition Pt: No data.

Explosive Properties: No data available.

Oxidizing Properties: No data available.

Other Information

Percent Volatile: No data.

Formula: C₁₇H₁₄O₆

Molecular Weight: 314.30

10. Stability and Reactivity

Reactivity: No data available.

Stability: Unstable [] Stable [X]

Stability Note(s): Stable if stored in accordance with information listed on the product insert.

Conditions To Avoid: No data available.

Polymerization: Will occur [] Will not occur [X]

Incompatibility - Materials To Avoid: strong acids
strong bases
strong oxidizing agents

Hazardous Decomposition Or Byproducts: carbon dioxide
carbon monoxide

11. Toxicological Information

Toxicological Information: The toxicological effects of this product have not been thoroughly studied.

Chronic Toxicological Effects: Aflatoxin B2 - Toxicity Data: Oral LD50 (duck): 1.7 mg/kg;
Aflatoxin B2 - Investigated as a mutagen and tumorigen.
Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.
See actual entry in RTECS for complete information.
Aflatoxin B2 RTECS Number: GY1722000

Carcinogenicity/Other Information: California Prop. 65 carcinogen
IARC: Group 1: Carcinogenic to humans (Aflatoxin B2)

Hazardous Components (Chemical Name)	CAS #	NTP	IARC	ACGIH	OSHA
1. Aflatoxin B2	7220-81-7	n.a.	1	n.a.	n.a.

12. Ecological Information

General 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

Globally Harmonized System of Classification and Labelling

Acute Toxicity: Oral, Category 2 - Danger! Fatal if swallowed
Acute Toxicity: Skin, Category 2 - Danger! Fatal in contact with skin
Acute Toxicity: Inhalation, Category 2 - Danger! Fatal if inhaled
Carcinogenicity, Category 1B - Danger! May cause cancer

LAND TRANSPORT (US DOT)

DOT Proper Shipping Name Toxins, extracted from living sources, solid, n.o.s. (Aflatoxin B2)

DOT Hazard Class: 6.1

DOT Hazard Label:	POISON
UN/NA Number:	3462
Packing Group:	I
LAND TRANSPORT (European ADR/RID)	
ADR/RID Shipping Name	Toxins, extracted from living sources, solid, n.o.s. (Aflatoxin B2)
UN Number:	3462
Hazard Class:	6.1 - POISON
Packing Group:	I
AIR TRANSPORT (ICAO/IATA)	
ICAO/IATA Shipping Name	Toxins, extracted from living sources, solid, n.o.s. (Aflatoxin B2)
UN Number:	3462
Hazard Class:	6.1 - POISON
Packing Group:	I
IATA Classification:	6.1
Additional Transport Information:	Transport in accordance with local, state, and federal regulations.

15. Regulatory Information

European Community Hazard Symbol codes T+: Very Toxic; Carcinogenic Hazard: 2

European Community Risk and Safety Phrases

- R26/27/28 - Very toxic by inhalation, in contact with skin and if swallowed.
- R45 - May cause cancer.
- S22 - Do not breathe dust.
- S24/25 - Avoid contact with skin and eyes.
- S28 - After contact with skin, wash immediately with plenty of soap-suds.
- 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 whenever possible.)
- S53 - Avoid exposure - obtain special instructions before use.

US EPA SARA Title III

Hazardous Components (Chemical Name)	CAS #	Sec.302 (EHS)	Sec.304 RQ	Sec.313 (TRI)	Sec.110
1. Aflatoxin B2	7220-81-7	No	No	No	No

Other US EPA or State Lists

Hazardous Components (Chemical Name)	CAS #	CAA HAP,ODC	CWA NPDES	TSCA	CA PROP.65
1. Aflatoxin B2	7220-81-7	No	No	No	No

Regulatory Information Statement: This SDS was prepared in accordance with 29 CFR 1910.1200, Regulation (EC) No.1272/2008, and European Directive 67/548/EEC as amended.

16. Other Information

Revision Date: 01/16/2013

Company Policy or Disclaimer

For research use only, not for human or veterinary use.
 DISCLAIMER: This information is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

N.A.=Not available, N.P.=Not applicable, N.D.=Not determined, N.E.=Not established, N.R.=Not required