

# MATERIAL SAFETY DATA SHEET

## Uric Acid DMSO

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

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### 1. Product and Company Identification

**Product Code:** 700324  
**Product Name:** Uric Acid DMSO  
**Manufacturer Information**  
**Company Name:** Cayman Chemical Company  
**Emergency Contact:** Cayman Chemical Company (800)364-9897  
**Information:** Cayman Chemical Company (734)971-3335

### 2. Hazards Identification

**Emergency Overview:** Combustible.  
Target Organ(s): eyes, skin.  
**Route(s) of Entry:** Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes Other: Injection  
**Health Hazards (Acute and Chronic):** Material is readily absorbed through skin.  
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.  
**LD 50 / LC 50:** Please refer to Section 11.  
**Signs and Symptoms Of Exposure:** Ingestion may cause gastrointestinal irritation with nausea, vomiting, diarrhea, headache, and dizziness.

### 3. Composition/Information on Ingredients

Hazardous Components (Chemical Name)	CAS #	Concentration	EC#	RTECS #
1. Dimethyl sulfoxide, anhydrous	67-68-5	100.0 %	200-664-3	PV6210000

### 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:** 89.00 C Method Used: Closed Cup  
**Explosive Limits:** LEL: 3.5% at 25.0 C UEL: 42% at 25.0 C  
**Autoignition Pt:** 215.00 C  
**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.  
Note: Combustible  
**Unusual Fire and Explosion Hazards:** Can release vapors that form explosive mixtures at temperatures at or above the flashpoint.  
Container explosion may occur under fire conditions.  
Emits toxic fumes under fire conditions.  
Sensitive to static discharge.

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<b>Hazardous Combustion Products:</b>	No data available.
<b>Suitable Extinguishing Media:</b>	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
<b>Unsuitable Extinguishing Media:</b>	A solid water stream may be inefficient.

### 6. Accidental Release Measures

<b>Steps To Be Taken In Case Material Is Released Or Spilled:</b>	Avoid release into the environment. Avoid breathing vapors and provide adequate ventilation. Remove all sources of ignition. 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). Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container.
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### 7. Handling and Storage

<b>Hazard Label Information:</b>	Avoid contact with skin and eyes. Do not reuse this container. Use with adequate ventilation. Wash thoroughly after handling
<b>Precautions To Be Taken in Handling:</b>	Avoid breathing (dust, vapor, mist, gas). Avoid prolonged or repeated exposure. Keep away from sources of ignition. Prevent the build up of electrostatic charge.
<b>Precautions To Be Taken in Storing:</b>	Keep away from heat, sparks, and flame. Keep tightly closed. Store at correct temperature.
<b>Other Precautions:</b>	Hygroscopic.

### 8. Exposure Controls/Personal Protection

Hazardous Components (Chemical Name)	CAS #	OSHA PEL	ACGIH TLV	Other Limits
1. Dimethyl sulfoxide, anhydrous	67-68-5	No data.	No data.	No data.
<b>Protective Equipment Summary - Hazard Label Information:</b>	Compatible chemical-resistant gloves    Eye wash station in work area    Lab coat    Safety glasses    Safety shower in work area    Vent Hood			
<b>Respiratory Equipment (Specify Type):</b>	NIOSH approved respirator, as conditions warrant.			
<b>Eye Protection:</b>	Safety glasses			
<b>Protective Gloves:</b>	Compatible chemical-resistant gloves			
<b>Other Protective Clothing:</b>	Lab coat			
<b>Ventilation:</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.			
<b>Work/Hygienic/Maintenance Practices:</b>	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

<b>Physical States:</b>	<input type="checkbox"/> Gas <input checked="" type="checkbox"/> Liquid <input type="checkbox"/> Solid
<b>Melting Point:</b>	No data.
<b>Boiling Point:</b>	No data.
<b>Autoignition Pt:</b>	215.00 C
<b>Flash Pt:</b>	89.00 C    Method Used: Closed Cup
<b>Explosive Limits:</b>	LEL: 3.5%    at 25.0 C    UEL: 42%    at 25.0 C
<b>Specific Gravity (Water = 1):</b>	No data.
<b>Bulk density:</b>	No data.
<b>Vapor Pressure (vs. Air or mm Hg):</b>	0.37 MM_HG    at 20.0 C
<b>Vapor Density (vs. Air = 1):</b>	No data.

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**Evaporation Rate (vs Butyl Acetate=1):** No data.  
**Solubility in Water:** No data.  
**Percent Volatile:** No data.  
**Heat Value:** No data.  
**Particle Size:** No data.  
**Corrosion Rate:** No data.  
**pH:** No data.  
**Appearance and Odor:** No data available.

### 10. Stability and Reactivity

**Stability:** Unstable [ ] Stable [ X ]  
**Conditions To Avoid - Instability:** heat, flames and sparks  
**Incompatibility - Materials To Avoid:** acid chlorides  
phosphorus halides  
strong acids  
alkali metals  
strong oxidizing agents  
strong reducing agents  
**Hazardous Decomposition Or Byproducts:** carbon monoxide  
carbon dioxide  
sulfur oxides  
**Possibility of Hazardous Reactions:** Will occur [ ] Will not occur [ X ]  
**Conditions To Avoid - Hazardous Reactions:** No data available.

### 11. Toxicological Information

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

**Chronic Toxicological Effects:** DMSO - Toxicity Data: Oral LD50 (rat): 14,500 mg/kg; Inhalation LC50 (rat): 40,250 ppm (4h);  
Dermal LD50 (rabbit): > 5,000 mg/kg; Irritation Data: Eyes (rabbit): 500 mg (24h) mild; Skin  
(rabbit): 500 mg (24h) mild;  
Only select Registry of Toxic Effects of Chemical Substances (RTECS) data is presented here.  
See actual entry in RTECS for complete information.  
DMSO RTECS Number: PV6210000

**Carcinogenicity/Other Information:** No data available.

**Carcinogenicity:** NTP? No IARC Monographs? No OSHA Regulated? No

### 12. 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 Shipping Name** Not dangerous goods.  
**AIR TRANSPORT (ICAO/IATA)**  
**ICAO/IATA Shipping Name** Not dangerous goods.  
**Additional Transport Information:** Transport in accordance with local, state, and federal regulations.

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### 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. Dimethyl sulfoxide, anhydrous	67-68-5	No	No	No	No

#### US EPA CAA, CWA, TSCA

Hazardous Components (Chemical Name)	CAS #	EPA CAA	EPA CWA NPDES	EPA TSCA	HPV/LPV
1. Dimethyl sulfoxide, anhydrous	67-68-5	HAP, ODC ()	No	Inventory	

### 16. Other Information

#### Company Policy or Disclaimer

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