

# Safety Data Sheet

## MANUFACTURER

CellMosaic, Inc.  
10A Roessler Road, Woburn, MA 01801, USA  
Phone: 1- 781-463-0002; Fax: 1- 781-998-4694, E-mail: info@cellmosaic.com

## General Information

**Trade Name:** S-Methyl DM1 (S-Methyl Mertansine) Standard  
**Part No. Covered by this SDS:** CM11016-1MG

## Product Content

1) One vial containing purified solution of 1 mg of S-Methyl DM1 (S-Methyl Mertansine) Standard.

## Handling and Storage for Hazardous Chemicals

Handling of S-Methyl DM1 (S-Methyl Mertansine) Standard: See Attached Supplement.

## Transportation

Transport in accordance with local, state, and federal regulations. When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. **Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.**

**Supplemental information starts from next page.**

## S-Methyl DM1 (S-Methyl Mertansine) Standard

### SECTION 1. Identification of the substance/mixtures and of the company/undertaking

#### 1.1. Product identifiers

Product Name: S-Methyl DM1 (S-Methyl Mertansine) Standard.

Synonym: N2'-deacetyl-N2'-(3-methylthio-1-oxopropyl)-maytansine.

Product No.: CM11016

#### 1.2. Detail of the supplier of the safety data sheet

Company: CellMosaic, Inc. 10A Roessler Road, Woburn, MA 01801, Phone: +1 781-463-0002

### SECTION 2. Hazards Identification

#### 2.1. Classification of the substance or mixture



Acute Toxicity: Oral, Category 2

Acute Toxicity: Skin, Category 3

Skin Corrosion/Irritation, Category 2

Germ Cell Mutagenicity, Category 2

Carcinogenicity, Category 2

Toxic to Reproduction, Category 2

Specific Target Organ Toxicity (single exposure), Category 2

#### 2.2. GHS Label elements, including precautionary statements.

**Signal Word:** Danger!

**Hazard Statement(s):**

H311: Toxic contact with skin.

H301: Toxic if swallowed.

H340: May cause genetic defects.

H350: May cause cancer.

H360: May damage fertility or the unborn child.

H371: May causes damage to organs.

**Precautionary Statement(s):**

P202: Do not handle until all safety precautions have been read and understood.

P260: Do not breathe {dust/fume/gas/mist/vapors/spray}.

P262: Do not get in eyes, on skin, or on clothing.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**GHS Response Phrases:**

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P302+352: IF ON SKIN: Wash with plenty of soap and water.

P303+361+353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+311: If exposed or concerned: Call a POISON CENTER/Doctor.

- P313: Get medical advice/attention.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P321: Specific treatment: There is no specific antidote.
- P361+364: Take off immediately all contaminated clothing and wash it before reuse.
- P363: Wash contaminated clothing before reuse.

**GHS Storage and Disposal Phrases:**

Please refer to Section 7 for Storage and Section 13 for Disposal information.

**SECTION 3. Composition and Information on Ingredients**

Ingredient	CAS No.	Percent	Hazardous
S-methyl DM1 (S-Methyl Mertansine)	912569-84-7	0.8%	Yes
Dimethyl sulfoxide	67-68-5	99.2%	No

**SECTION 4. First Aid Measures**

- Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.
- Ingestion:** 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.
- Skin Contact:** Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Get medical attention.
- Eye Contact:** Check for and remove contact lenses. Immediately flush your eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention.
- Notes to Physician:** Treat symptomatically and supportively.

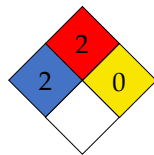
**SECTION 5. Fire Fighting Measures**

**5.1. Flammability**

- Flash Point: 90-100°C (194-212 °F).
- Autoignition Temperature: >300 °C (572 °F).
- Flammable Limits (% in air): Lower Limit 1.3-3.5 vol%, Upper Limit 40-60 vol%.
- Products of Combustion: May decompose into irritating and highly toxic gases under fire conditions (nitrogen oxides, sulfur oxides, carbon monoxide, carbon dioxide).
- Specific Fire Hazards: As in any fire, always wear self-contained breathing apparatus in pressure-demand (MSA/NIOSH approved or equivalent), and full protective gear.
- Specific Explosion Hazards: may produce poisonous gases. Wear rubber gloves, SCBA, and rubber suit
- Fire Fighting Media: Foam, carbon dioxide, dry powder, and water spray.

**5.2. NFPA**

- Health Rating: 2
- Flammability Rating: 2
- Instability: 0
- Physical hazards N/A



**SECTION 6. Accidental Release Measures**

Avoid raising and breathing dust and aerosol 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). Take steps to avoid release into the environment, if safe to do so. Contain spill and collect, as appropriate and transfer to a chemical waste container for disposal in accordance with local regulations.

## **SECTION 7. Handling and Storage**

**Precautions:** Always use proper personal protective equipment as described in section 8. Wash thoroughly after handling. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid prolonged or repeated exposure.

**Storage:** Keep in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

## **SECTION 8. Exposure Controls/Personal Protection**

**Engineering Controls:** Use explosion-proof ventilation equipment. Facilities for storing or using the material should be equipped with an eyewash station and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

**Personal Protective Equipment:** Wear protective chemical goggles or other appropriate eye protection. Use compatible chemical-resistant gloves and protective clothing to prevent skin exposure. Always use a NIOSH or European Standard EN 149 approved respirators when necessary.

**Work/Hygienic/Maintenance Practices:** Do not take internally.

**Exposure Limits:** None established.

## **SECTION 9. Physical and Chemical Properties**

**Physical State and Appearance:** Solution

**Appearance and Odor:** Solution

**Solubility:** Soluble in water, methanol.

**pH:** No information available

**Boiling Point:** No information available

**Freezing/Melting Point:** No information available

**Flash Point:** No information available

**Autoignition Temperature:** No information available

**Flammable Limits (% in air):** No information available

**Vapor Density (Air=1):** N/A

**Vapor Pressure:** N/A

**Evaporation Rate (Butyl acetate =1):** No information available

**Partition coefficient; n-octanol/water:** No information available

**Decomposition Temperature:** No information available

**Viscosity:** N/A

**Molecular Formula:** C<sub>36</sub>H<sub>50</sub>ClN<sub>3</sub>O<sub>10</sub>S

**Molecular Weight:** 752.32 Da

## **SECTION 10. Stability and Reactivity**

**Stability:** Stable at room temperature in closed container under normal handling and storage conditions.

**Reactivity:** No information available

**Hazardous Decomposition Products:** carbon oxide, carbon monoxide, hydrogen sulfide, nitrogen oxides, Sulphur oxides

**Hazardous Polymerization:** Will not occur

**Incompatibilities – Materials to Avoid:** strong oxidizing agents, acid chlorides, phosphorus halides, strong acids, strong reducing agents

## **SECTION 11. Toxicological Information**

Information on Toxicological Effects: the toxicological effects of this product have not been thoroughly studied.

## **SECTION 12. Ecological Information**

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

**Persistence and degradability:** No information available.

**Bioaccumulative potential:** No information available.  
**Mobility in Soil:** No information available.  
**Results of PBT and vPvB:** No information available.  
**Other adverse effects:** No information available.

**SECTION 13. Disposal Considerations**

Dispose of containers and unused contents in accordance with federal, state, and local requirements.

**SECTION 14. Transport Information**

**Land Transport (US DOT):**

Proper Shipping Name: Toxic and combustible liquid, n.o.s. (S-methyl DM1 solution in dimethyl sulfoxide)  
 Class: None

Packing Group: III

Poison Inhalation Hazard: Yes

**Land Transport (European ADR/RID):**

ADR/RID Shipping Name: Toxic and combustible liquid, n.o.s (S-methyl DM1 solution in dimethyl sulfoxide)  
 Class: None

Packing Group: III

Poison Inhalation Hazard: Yes

**Air Transport (ICAO/IATA):**

ICAO/IATA Shipping Name: Toxic and combustible liquid, n.o.s (S-methyl DM1 solution in dimethyl sulfoxide)  
 Class: None

Packing Group: III

Poison Inhalation Hazard: Yes

**Additional Transport Information:**

Transport in accordance with local, state, and federal regulations. When sold in quantities of less than or equal to 1 mL, or 1 g, with an Excepted Quantity Code of E1, E2, E4, or E5, this item meets the De Minimis Quantities exemption, per IATA 2.6.10. **Therefore, packaging does not have to be labeled as Dangerous Goods/Excepted Quantity.**

**SECTION 15. Regulatory Information**

**EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists**

CAS#	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 (RQ)	S. 313 (TR)
912569-84-7	S-methyl DM1 (S-Methyl Mertansine)	No	No	No

CAS#	Hazardous Components (Chemical Name)	Other US EPA or State Lists
912569-84-7	S-methyl DM1 (S-Methyl Mertansine)	CAA HAP, ODC: No; CWA NPDES: No; TSCA: No; CA PROP.65: No

**SECTION 16. Other Information**

**References:** This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and WHMIS Controlled Products Regulation, Chemical Abstract databases, Superfund Amendments and Reauthorization Act (SARA) and other similar compound's SDS.

**Other Special Considerations:** Not available.

**Created:** Nov. 29, 2023  
**Last Updated:** Nov. 29, 2023

**Revision Information:** Version 2  
**Product Use:** Laboratory Reagent

**Disclaimer:**

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**Prepared by:** CellMosaic, Inc. Health and Safe