



# SIGMA-ALDRICH

## Material Safety Data Sheet

Date Printed: 08/01/2000  
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Version 1.20

### Section 1 - Product and Company Information

<b>Product Name</b>	MALACHITE GREEN OXALATE, CERTIFIED (C.I. 42000)		
<b>Product Number</b>	861219		
<b>Brand</b>	Aldrich Chemical		
<b>Company</b>	Sigma-Aldrich		
<b>Street Address</b>	3050 Spruce Street		
<b>City, State, Zip, Country</b>	St. Louis, MO 63103 US		
<b>Technical Phone:</b>	314 771 5765	<b>Emergency Phone:</b>	414 273 3850 Ext.5996
<b>Fax:</b>	800 325 5052		

### Section 2 - Composition/Information on Ingredient

<u>Substance Name</u>	<u>CAS #</u>	<u>SARA 313</u>
MALACHITE GREEN OXALATE	2437-29-8	No
<b>Formula</b>	C <sub>26</sub> H <sub>27</sub> N <sub>2</sub> O <sub>6</sub>	
<b>Synonyms</b>	Malachite Green OxalateAmmonium, (4-(p-(dimethylamino)-alpha-phenylbenzylidene)-dimethyl-, oxalate (2:1), oxalate (1:1)	

### Section 3 - Hazards Identification

#### Emergency Overview

Toxic (USA) Harmful (EU).  
Harmful if swallowed. Risk of serious damage to eyes.

#### HMIS Rating

Health: 2      Flammability: 0      Reactivity: 0

#### NFPA Ratings

Health: 2      Flammability: 0      Reactivity: 0

For additional information on toxicity, please refer to Section 11.

### Section 4 - First Aid Measures

#### Oral Exposure

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### Inhalation Exposure

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

#### Dermal Exposure (SKIN)

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

#### Eye Exposure

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

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## Section 5 - Fire Fighting Measures

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**Autoignition Temp:** N/A

**Flammability:** N/A

### Extinguishing Media

#### Suitable

Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

### Firefighting

#### Protective Equipment

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

#### Specific Hazard(s)

Emits toxic fumes under fire conditions.

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## Section 6 - Accidental Release Measures

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### Procedure to be Followed in Case of Leak or Spill

Evacuate area.

### Procedure(s) of Personal Precaution(s)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

### Methods for Cleaning Up

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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## Section 7 - Handling and Storage

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### Handling

#### User Exposure

Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

### Storage

#### Suitable

Store in a cool dry place. Keep tightly closed.

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## Section 8 - Exposure Controls / PPE

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### Engineering Controls

Safety shower and eye bath. Mechanical exhaust required.

### Personal Protective Equipment

#### Respiratory

NIOSH/MSHA-approved respirator.

#### Hand

Compatible chemical-resistant gloves.

#### Eye

Chemical safety goggles.

### General Hygiene Measures

Wash thoroughly after handling.

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## Section 9 - Physical/Chemical Properties

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### Appearance

#### Physical State

Solid

**RTECS Number:** BQ1190000

#### **Toxicity Data**

Oral - Rat: 275 mg/kg (LD50)

Remarks: Behavioral: Change in motor activity (specific assay).

Gastrointestinal: Hypermotility, diarrhea.

Gastrointestinal: Other changes.

#### **Irritation Data**

Eyes - Rabbit: 76 mg/kg KG

Remarks: severe irritation effect

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### **Section 12 - Ecological Information**

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### **Section 13 - Disposal Considerations**

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#### **Appropriate Method of Disposal of Substance or Preparation**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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### **Section 14 - Transport Information**

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#### **DOT**

**Proper Shipping Name:** None

**Non-Hazardous for Transport:** This substance is considered to be non-hazardous for transport.

#### **IATA**

**Proper Shipping Name:** None

**Non-Hazardous for Air Transport:** Non-hazardous for air transport.

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### **Section 15 - Regulatory Information**

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#### **EU Additional Classification**

**Symbol of Danger:** Xn

**Indication of Danger**

Harmful.

**Risk Statements** R: 22 41

Harmful if swallowed. Risk of serious damage to eyes.

**Safety Statements** S: 26 36/37/39 45

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

#### **US Classification and Label Text**

**Indication of Danger**

Toxic (USA) Harmful (EU).

**Risk Statements**

Harmful if swallowed. Risk of serious damage to eyes.

**Safety Statements**

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

#### **United States Regulatory Information**

**SARA 313 Listed:** No

Molecular Weight: 927.10 AMU

<u>Property</u>	<u>Value</u>
pH	N/A
BP/BP Range	N/A
MP/MP Range	144 - 150 °C
Freezing Point	N/A
Vapor Pressure	N/A
Vapor Density	N/A
Saturated Vapor Conc.	N/A
SG/Density	N/A
Bulk Density	N/A
Odor Threshold	N/A
Volatile%	N/A
VOC Content	N/A
Water Content	N/A
Solvent Content	N/A
Evaporation Rate	N/A
Viscosity	N/A
Partition Coefficient	N/A
Decomposition Temp.	N/A
Flash Point °F	N/A
Flash Point °C	N/A
Explosion Limits	N/A
Autoignition Temp	N/A
Solubility	N/A

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## Section 10 - Stability and Reactivity

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### Stability

#### Stable

Stable.

#### Materials to Avoid

Oxidizing agents.

### Hazardous Decomposition Products

#### Hazardous Decomposition Products

Carbon monoxide, Carbon dioxide, Nitrogen oxides.

### Hazardous Polymerization

#### Hazardous Polymerization

Will not occur.

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## Section 11 - Toxicological Information

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### Route of Exposure

#### Skin Contact

May cause skin irritation.

#### Skin Absorption

May be harmful if absorbed through the skin.

#### Eye Contact

Causes severe eye irritation.

#### Inhalation

Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.

#### Ingestion

Harmful if swallowed.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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## Section 16 - Other Information

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### Warranty

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2000 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.