



# Malachite Green Solution

## Safety Data Sheet

according to the Model Work Health and Safety Regulations

Date of issue: 30/11/2018

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Version: 1.0

### SECTION 1: Identification : Product identifier and chemical identity

#### 1.1. Product identifier

Trade name : Malachite Green Solution  
Product code : 38016SS8B

#### 1.2. Other means of identification

No additional information available

#### 1.3. Recommended use of the chemical and restrictions on use

Recommended use : For use with Acid Fast Stain Kit  
Restrictions on use : Other uses

#### 1.4. Supplier's details

Leica Microsystems Pty Ltd  
Suite 2, Level 3, Building A, Talavera Road  
Macquarie Park - 2113 Australia

#### 1.5. Emergency phone number

Organisation/Company	Emergency number
ChemTrec	800-424-9300
International Calls (call collect)	+1 703-527-3887
Australia 24 Hr Poisons Information Centre	13 11 26

### SECTION 2: Hazards identification

#### 2.1. Classification of the hazardous chemical

##### Classification according to the model Work Health and Safety Regulations (WHS Regulations)

Flammable liquids, Category 3 H226  
Skin corrosion/irritation, Category 1A H314

#### 2.2. Label elements

Signal word (GHS-AU) : Danger  
Hazard statements (GHS-AU) : H226 - Flammable liquid and vapour  
H314 - Causes severe skin burns and eye damage  
Precautionary statements (GHS-AU) : P210 - Keep away from heat, sparks, open flames, hot surfaces. No smoking.  
P233 - Keep container tightly closed  
P240 - Ground/bond container and receiving equipment  
P241 - Use explosion-proof equipment  
P242 - Use only non-sparking tools  
P243 - Take precautionary measures against static discharge  
P260 - Do not breathe mist/vapours/spray.  
P264 - Wash thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P310 - Immediately call a POISON CENTER or doctor/physician  
P321 - Specific treatment (see supplemental first aid instruction on this label)  
P363 - Wash contaminated clothing before reuse  
P370+P378 - In case of fire: Use dry chemical, foam, or water spray for extinction.  
P403+P235 - Store in a well-ventilated place. Keep cool  
P405 - Store locked up  
P501 - Dispose of contents/container in accordance with all local/regional/national/international regulations

#### 2.3. Other hazards

No additional information available

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### SECTION 3: Composition/information on ingredients

Name	CAS-No.	Compound type	%	Classification according to the model Work Health and Safety Regulations (WHS Regulations)
acetic acid	64-19-7		< 10	Flam. Liq. 3, H226 Acute Tox. 5 (Oral), H303 Skin Corr. 1A, H314
Malachite Green Oxalate	2437-29-8		< 1.5	Not classified

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures general	: Call a physician immediately.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a physician immediately.

#### 4.2. Symptoms caused by exposure

Symptoms/effects after skin contact	: Burns.
Symptoms/effects after eye contact	: Serious damage to eyes.
Symptoms/effects after ingestion	: Burns.

#### 4.3. Indication of any immediate medical attention and special treatment needed

Other medical advice or treatment	: Treat symptomatically.
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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media	: Water spray. Dry powder. Foam. Carbon dioxide.
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#### 5.2. Special hazards arising from the substance or mixture

Fire hazard	: No data available on direct fire hazard.
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#### 5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
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### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Avoid contact with skin and eyes.
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##### 6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
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#### 6.2. Environmental precautions

Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up	: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.
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### SECTION 7: Handling and storage, including how the chemical may be safely used

#### 7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes.
Hygiene measures	: Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.  
Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters - exposure standards

acetic acid (64-19-7)		
USA - ACGIH	ACGIH TWA (ppm)	10 ppm (Acetic acid; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
USA - ACGIH	ACGIH STEL (ppm)	15 ppm (Acetic acid; USA; Short time value; TLV - Adopted Value)

### Exposure limit values for the other components

### 8.2. Monitoring

No additional information available

### 8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

### 8.4. Personal protective equipment

Hand protection : Protective gloves  
Eye protection : Safety glasses  
Skin and body protection : Wear suitable protective clothing  
Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment  
Environmental exposure controls : Avoid release to the environment.

## SECTION 9: Physical and chemical properties

Physical state : Liquid  
Colour : Green  
Odour : Vinegar odour  
Odour threshold : No data available  
pH : 2  
Relative evaporation rate (butylacetate=1) : No data available  
Melting point : Not applicable  
Boiling point : No data available  
Flash point : No data available  
Auto-ignition temperature : No data available  
Flammability (solid, gas) : No data available  
Vapour pressure : No data available  
Relative density : No data available  
Density : 1.02  
Solubility : No data available  
Log Pow : No data available  
Viscosity : No data available  
Explosive properties : No data available  
Explosive limits : No data available  
Minimum ignition energy : No data available  
Fat solubility : No data available

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### SECTION 10: Stability and reactivity

Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No dangerous reactions known under normal conditions of use.
Conditions to avoid	: Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

### SECTION 11: Toxicological information

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

#### acetic acid (64-19-7)

LD50 oral rat	3310 mg/kg bodyweight (Rat; Other; Read-across)
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#### Malachite Green Oxalate (2437-29-8)

LD50 oral rat	275 mg/kg (Rat)
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Skin corrosion/irritation	: Causes severe skin burns and eye damage. pH: 2
Serious eye damage/irritation	: pH: 2
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified

#### Malachite Green Solution

Density	1.02
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### SECTION 12: Ecological information

According to the National Code of Practice for the Preparation of Material Safety Data Sheets, Environmental classification information is not mandatory. Information relevant for GHS classification is available on request

#### 12.1. Ecotoxicity

Ecology - general	: Harmful to aquatic life with long lasting effects. Harmful to aquatic life.
Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

#### 12.2. Persistence and degradability

##### acetic acid (64-19-7)

Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Highly mobile in soil.
Biochemical oxygen demand (BOD)	0.6 - 0.74 g O <sub>2</sub> /g substance
Chemical oxygen demand (COD)	1.03 g O <sub>2</sub> /g substance
ThOD	1.07 g O <sub>2</sub> /g substance

##### Malachite Green Oxalate (2437-29-8)

Persistence and degradability	Not readily biodegradable in water.
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#### 12.3. Bioaccumulative potential

##### acetic acid (64-19-7)

BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology

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acetic acid (64-19-7)	
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

Malachite Green Oxalate (2437-29-8)	
BCF fish 1	See section 12.1 on ecotoxicology
Log Pow	See section 12.1 on ecotoxicology
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

### 12.4. Mobility in soil

acetic acid (64-19-7)	
Surface tension	0.028 N/m (20 °C)
Log Pow	See section 12.1 on ecotoxicology
Log Koc	See section 12.1 on ecotoxicology
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

Malachite Green Oxalate (2437-29-8)	
Log Pow	See section 12.1 on ecotoxicology

### 12.5. Other adverse effects

Ozone : Not classified  
Other adverse effects : No additional information available

## SECTION 13: Disposal considerations

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

## SECTION 14: Transport information

### 14.1. UN number

UN-No. (IMDG) : 2790  
UN-No. (IATA) : 2790

### 14.2. Proper Shipping Name - Addition

Proper Shipping Name (IMDG) : ACETIC ACID SOLUTION  
Proper Shipping Name (IATA) : Acetic acid solution

### 14.3. Transport hazard class(es)

#### IMDG

Transport hazard class(es) (IMDG) : 8  
Danger labels (IMDG) : 8



#### IATA

Transport hazard class(es) (IATA) : 8  
Hazard labels (IATA) : 8



### 14.4. Packing group

Packing group (IMDG) : III  
Packing group (IATA) : III

### 14.5. Environmental hazards

Marine pollutant : No

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### 14.6. Special precautions for user

Specific storage requirement : No data available  
Shock sensitivity : No data available

### 14.7. Additional information

Other information : No supplementary information available

#### Transport by road and rail

Not applicable

#### Transport by sea

UN-No. (IMDG) : 2790  
Limited quantities (IMDG) : 5 L  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P001, LP01  
IBC packing instructions (IMDG) : IBC03  
Tank instructions (IMDG) : T4  
Tank special provisions (IMDG) : TP1  
EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE  
EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES  
Stowage category (IMDG) : A  
Properties and observations (IMDG) : Colourless liquid with a pungent odour. Miscible with water. Corrosive to lead and most other metals. Corrosive to skin, eyes and mucous membranes.

#### Air transport

UN-No. (IATA) : 2790  
PCA Excepted quantities (IATA) : E1  
PCA Limited quantities (IATA) : Y841  
PCA limited quantity max net quantity (IATA) : 1L  
PCA packing instructions (IATA) : 852  
PCA max net quantity (IATA) : 5L  
CAO packing instructions (IATA) : 856  
CAO max net quantity (IATA) : 60L  
ERG code (IATA) : 8L

### 14.8. Hazchem or Emergency Action Code

Hazchemcode : Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No additional information available

### 15.2. International agreements

No additional information available

## SECTION 16: Any other relevant information

Revision date : 30/11/2018

Classification:

Flam. Liq. 3	H226
Skin Corr. 1A	H314

Full text of H-statements:

Acute Tox. 5 (Oral)	Acute toxicity (oral), Category 5
Flam. Liq. 3	Flammable liquids, Category 3
Skin Corr. 1A	Skin corrosion/irritation, Category 1A
H226	Flammable liquid and vapour
H303	May be harmful if swallowed
H314	Causes severe skin burns and eye damage

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SDS Australia Leica

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*