



**Precautionary Statement(s): Prevention:**

P201	Obtain special instructions before use.
P261	Avoid breathing dusts/mist.
P264	Wash hands and skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing must not be allowed out of the workplace.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**

P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P310	IF exposed or concerned: Immediately call a POISON CENTRE/doctor.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

**Storage:**

P405	Store locked up.
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**Disposal:**

P501	Dispose of contents/container in accordance with local, regional, national and international regulations.
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**Other Hazards**

Hazard Not Otherwise Classified (HNOC): Lachrymator.

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical Name	Percent	CAS#
Diethyl 2-methylenemalonate	98-99%	3377-20-6

**SECTION 4 FIRST-AID MEASURES****First-Aid Measures****Inhalation:**

Remove source of exposure or move to fresh air. Get medical advice/attention if you feel unwell or are concerned.

**Skin Contact:**

Avoid direct contact. Wear chemical protective clothing if necessary. Immediately wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 15-20 minutes. If skin irritation occurs, get medical advice/attention.

**Eye Contact:**

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. If eye irritation persists, get medical advice/attention.

**Ingestion:**

Never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Get medical advice/attention if you feel unwell or are concerned.

**Most Important Symptoms and Effects, Acute and Delayed**

Ingestion: Harmful if swallowed. May cause stomach distress, nausea, or vomiting.

Skin Contact: Causes skin irritation. Repeated contact may result in an allergic skin reaction.

Eye Contact: Causes serious eye damage.

**Special Instructions**

Avoid breathing dust, or mists.

**Indication of any Immediate Medical Attention and Special Treatment Needed:** In case of an accident or if you feel unwell, seek medical advice immediately.

**Medical Conditions Aggravated by Exposure:** No information available.

**SECTION 5 FIRE-FIGHTING MEASURES****Extinguishing Media**

**Suitable Extinguishing Media:** Not combustible. Use extinguishing agent suitable for surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

**Specific Hazards Arising from the Chemical**

Forms carbon monoxide and carbon dioxide upon burning. In a fire, the following hazardous materials may be generated: toxic, corrosive chemicals.

**Special Protective Equipment and Precautions for Fire fighters**

Before entry, especially into confined areas, use an appropriate monitor to check for toxic gases or vapors. Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

**SECTION 6 ACCIDENTAL RELEASE MEASURES****Personal Precautions, Protective Equipment, and Emergency Procedures**

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

**Environmental Precautions**

Do not allow into any sewer, on the ground or into any waterway.

**Methods and Materials for Containment and Cleaning Up**

Contain and soak up spill with absorbent that does not react with spilled product.

**SECTION 7 HANDLING AND STORAGE****Precautions for Safe Handling**

Only use where there is adequate ventilation. Do not get in eyes, on skin or on clothing. Do not handle until all safety precautions have been read and understood. Do not breathe dust or mists. Do not aerosolize this product.

## Conditions for Safe Storage

Store in an area that is: dry, cool, well-ventilated. Access to product should be restricted. Only personnel with appropriate training should be allowed access to this product.

## SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

### Appropriate Engineering Controls

Use a local exhaust ventilation and enclosure, if necessary, to control amount in the air.

### Individual Protection Measures:

Eye/Face Protection:	Wear chemical safety goggles.
Skin Protection:	Wear chemical protective clothing e.g. impervious gloves, aprons, boots.
Respiratory Protection:	In case of insufficient ventilation, wear suitable respiratory equipment. A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	Clear colorless liquid.
<b>Odor</b>	Pungent
<b>Odor Threshold</b>	No information available
<b>pH</b>	Not applicable
<b>Melting Point/Freezing Point</b>	< -81.7 °C (< -115.1 °F)
<b>Initial Boiling Point/Range</b>	210 °C (410 °F)
<b>Flash Point</b>	92 °C (197.6 °F) (closed cup)
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Upper/Lower Flammability or Explosive Limit</b>	No information available
<b>Vapor Pressure</b>	19Pa at 20 °C (68 °F); 30Pa at 25 °C (77 °F)
<b>Vapor Density (air = 1)</b>	No information available
<b>Relative Density (water = 1)</b>	1.05 g/cm <sup>3</sup> at 20°C (68 °F)
<b>Solubility</b>	Insoluble in water; soluble in common organic solvents.
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	No information available
<b>Auto-ignition Temperature</b>	300°C (572 °F) at 1024-1026 hPa
<b>Decomposition Temperature</b>	No information available
<b>Viscosity</b>	Not available (kinematic); 20 - 100 centipoises at 25 °C (77 °F) (dynamic)
<b>Other Information</b>	
<b>Physical State</b>	Liquid
<b>Bulk Density</b>	1.1±0.1 g/cm <sup>3</sup>
<b>Molecular Weight</b>	172.18 g/mol
<b>Critical Temperature</b>	No information available
<b>Electrical Conductivity</b>	No information available

Product Identifier: Chemilian™ M1000 XP

SDS No.: 200\_3

Date of Preparation: June 16, 2020

**Saturated Vapour  
Concentration**

No information available

## SECTION 10 STABILITY AND REACTIVITY

### Reactivity

Polymerization will occur in the presence of alkaline materials. Excessive heat may be released upon polymerization. Gradual degradation may occur with water or moisture.

### Chemical Stability

Stable if inhibited.

### Possibility of Hazardous Reactions

Polymerizes in the presence of alkaline conditions (high pH). Releases a large amount of heat.

### Conditions to Avoid

Prolonged exposure to high temperatures. Water, moisture or humidity. Alkaline conditions (high pH).

### Incompatible Materials

Polymerizes on contact with: bases (e.g. sodium hydroxide, triethylamine, etc.), water.

### Hazardous Decomposition Products

Oxides of carbon.

## SECTION 11 TOXICOLOGICAL INFORMATION

Experimental Sample. The toxicological properties of this material have not been fully determined.

### Likely Routes of Exposure

Skin contact.

### Acute Toxicity

Acute Inhalation Toxicity: LC50: No information available.

Acute Oral Toxicity: LD50 = 550 mg/kg (EPA 870.1200)

Acute Dermal Toxicity: LD50 >5000 mg/kg (EPA 870.1100)

### Skin Corrosion/Irritation

Can cause skin irritation. Rabbit dermal irritation (OECD 404)

### Serious Eye Damage/Irritation

Causes serious eye damage. Bovine Cornea Opacity and Permeability (BCOP – OECD 437)

### STOT (Specific Target Organ Toxicity) - Single Exposure

No information available.

### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information available.

### Respiratory and/or Skin Sensitization

Can cause an allergic reaction (skin sensitization) based on information from Local Lymph Node Assays (OECD 229)

### Carcinogenicity

This product is not listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) and has not been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA. Structural features indicate low potential for carcinogenic activity.

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**Reproductive Toxicity**

No information available.

**Development of Offspring**

No information available.

**Sexual Function and Fertility**

No information available.

**Germ Cell Mutagenicity**

Suspected of causing genetic defects (AMES and Micronucleus Positive)

**Interactive Effects**

No information available.

**Aspiration Hazards**

No information available.

**SECTION 12 ECOLOGICAL INFORMATION****Persistence and Degradability**

No information available.

**Bioaccumulative Potential**

No information available.

**Mobility in Soil**

No information available.

**Other Adverse Effects**

No information available

**SECTION 13 DISPOSAL CONSIDERATIONS****Disposal Methods**

Bury in a licensed landfill or burn in an approved incinerator according to federal, provincial/state, and local regulations.

Do not rinse containers with water.

**SECTION 14 TRANSPORT INFORMATION**

**Not regulated for transport.**

**SECTION 15 REGULATORY INFORMATION****Safety, Health and Environmental Regulations**

No information available.

**USA**

Toxic Substances Control Act (TSCA) Section 8(b)

Material is provided for Research and Development Purposes only per 40 CFR 720.36.

## SECTION 16

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**By Phone No.** 513-453-0107  
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**Key to Abbreviations** ACGIH® = American Conference of Governmental Industrial Hygienists AIHA = American Industrial Hygiene Association  
HSDB® = Hazardous Substances Data Bank  
IARC = International Agency for Research on Cancer NFPA = National Fire Prevention Association  
NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program  
OSHA = US Occupational Safety and Health Administration RTECS® = Registry of Toxic Effects of Chemical Substances

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