

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

### 1.1. PRODUCT IDENTIFIER

**Product name:** MeloCon<sup>®</sup> LC  
**EPA Registration No.** 64137-36-70051  
**Active Ingredient:** *Purpureocillium lilacinum* strain 251 (formerly *Paecilomyces lilacinus* strain 251)  
**CAS No.:** None

### 1.2. IDENTIFIED AND RECOMMENDED USES

Nematicide, Insecticide

### 1.3. SUPPLIER DETAILS

**Name:** Certis USA LLC  
**Address:** 9145 Guilford Road, Suite 175  
Columbia, Maryland 21046  
USA  
**Phone Number:** +1 (800) 847-5620  
**Website:** <http://www.certisbio.com>

### 1.4. EMERGENCY TELEPHONE NUMBER

**Emergency number:** +1 (800) 255-3924

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. CLASSIFICATION OF THE SUBSTANCE/MIXTURE ACCORDING TO:

- Globally Harmonized System of Classification and Labelling of Chemicals (GHS section 1.5.2).
- Canadian Hazardous Product Act (HPA)
- US Occupational Safety and Health Administration (OSHA)
- Regulation 1272/2008/EC (CLP)

#### Classification:

Skin Sensitizer Category 1  
Eye Irritation Category 2  
Chronic Aquatic Toxicity Category 2

## 2.2. LABELING ACCORDING TO THE GLOBALLY HARMONIZED SYSTEM (GHS) AND TO THE REGULATION 1272/2008/EC

**Signal Word:** Warning

**Hazard Pictogram:**



**Hazard Statements:**

H317 – May cause allergic skin reaction.  
H319 – Causes serious eye irritation.  
H411 – Toxic to aquatic life with long lasting effects.  
EUH401 – To avoid risks to human health and the environment, comply with the instructions for use.

**Precaution Prev:**

P264 – Wash hands thoroughly after handling.  
P272 – Contaminated work clothing should not be allowed out of the workplace.  
P280 – Wear eye protection/face protection.

**Precaution Resp:**

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.  
P333 + P317 – If skin irritation or rash occurs: Get medical advice/attention.  
P337 + P317 – If eye irritation persists: Get medical help.  
P362 + P364 – Take off contaminate clothing and wash it before reuse.  
P391 – Collect spillage.

**Precaution Disp:**

P501 – Dispose of contents/container in accordance with national regulations.

## 2.3. OTHER HAZARDS

The substance is not considered as a PBT or vPvB substance.

## SECTION 3: COMPOSITION

Substance name	CAS-, EC or index number	REACH Registration No.	Concentration	Classification - pictograms - H-statements -category
<i>Purpureocillium lilacinum</i> strain 251	None	None	5.0 x 10 <sup>10</sup> active spores/mL	None
Polyether modified trisiloxane	134180-76-0	None	> 25%	Acute Tox. 4, H312 Acute Tox. 4, H332 Eye Irr. 2, H319 Aquatic Chronic 2, H411

## SECTION 4: FIRST AID MEASURES

### 4.1. DESCRIPTION OF FIRST AID MEASURES

**General**

<b>protection:</b>	Protection of rescue workers: Wear appropriate individual protection equipment (see Section 8). Transport the affected person into the open air. Remove contaminated shoes and clothing.
<b>Inhalation:</b>	In the event of inhalation, take into the open air. Do not allow the person to get cold. Keep victim resting in a semi-seated position. In the absence of breathing, use artificial respiration. Consult a doctor.
<b>Ingestion:</b>	In the event of ingestion, rinse the mouth with water (only if person is conscious). Consult a doctor if symptoms develop.
<b>Contact with the skin:</b>	Rinse thoroughly in running water and soap. Remove contaminated shoes and clothing. Consult a doctor if symptoms develop.
<b>Contact with the eyes:</b>	Rinse thoroughly with running water, with the eyelids opened for a sufficient length of time (protect uninjured eye). Consult a doctor if symptoms develop.
<b>First aid facilities:</b>	Ensure that automatic eye baths and safety showers are located close to the workstations.

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4.2. MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

No symptoms known or expected.

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4.3. INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Treat symptomatically.

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SECTION 5: FIREFIGHTING MEASURES

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5.1. EXTINGUISHING MEDIA

**Suitable Extinguishing Media:** Water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Unsuitable Extinguishing Media:** High volume water jet.

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5.2. SPECIAL HAZARDS ARISING FROM THE MATERIAL

Do not inhale explosion and combustion gases. Burning may produce heavy smoke and dangerous gases.

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5.3. ADVICE FOR FIREFIGHTERS

Wear a self-contained breathing apparatus (SCBA) when exposed to confined or enclosed fires as product powder could be in the air. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

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SECTION 6: ACCIDENTAL RELEASE MEASURES

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6.1. PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Avoid contact with the eyes, skin and clothing. Use appropriate protective equipment (see Section 8)

## 6.2. ENVIRONMENTAL PRECAUTIONS

Do not allow to enter into surface water or drains. Retain contaminated washing water and dispose it.

## 6.3. METHODS AND MATERIALS FOR CLEAN UP

**Small accidental spillage or leak:** Avoid the formation of dust or spray. Mop up with appropriate material. Place in an appropriate container. Clean the area affected with plenty of water.

**Large accidental spillage or leak:** Prevent spillage into the drains, subsoil or confined areas. Contain if necessary. Mop up the product spilled with inert material (e.g., dry sand or dry earth) and place in a chemical waste container. Recycle if possible.

## 6.4. REFERENCE TO OTHER SECTIONS

See Section 8 for personal protective equipment and Section 13 waste disposal.

# SECTION 7: HANDLING AND STORAGE

## 7.1. PRECAUTIONS FOR SAFE HANDLING

**Handling:** Avoid contact with eyes. Use localized ventilation system. Don't use empty container before it has been cleaned. Before making transfer operations, assure that there are not any incompatible residues in the containers.

**Occupational hygiene:** Wash hands thoroughly after handling. Do not eat, drink or smoke while working. Store work clothing separately. See also Section 4 for recommended equipment.

## 7.2. CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

**Place of storage:** Store in a place accessible by authorized persons only. Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from direct sunlight. Protect from frost. Keep away from food, drink and animal feedingstuffs.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1. PROTECTION OF LUNGS

In case of insufficient ventilation, wear respirator with a particle filter mask (protection factor 20).

## 8.2. PROTECTION OF SKIN

Wear standard coveralls and Category 3 Type 5 suit.

Wear two layers of clothing wherever possible. Polyester/cotton or cotton overalls should be worn under chemical protection suit and should be professionally laundered frequently.

If there is a risk of significant exposure, consider a higher protective type suit.

### 8.3. PROTECTION OF HANDS

Wear chemical resistant nitrile rubber gloves.

### 8.4. PROTECTION OF EYES

Safety glasses with side-shield.

### 8.5. EXPOSITION LIMITS

No known occupational limit values.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Dark brown to brown-violet liquid
<b>Odor:</b>	Characteristic
<b>pH:</b>	No data available
<b>Melting Point / Freezing Point:</b>	No data available
<b>Initial Boiling Point:</b>	No data available
<b>Boiling Range:</b>	No data available
<b>Flash Point:</b>	112°C
<b>Evaporation Rate:</b>	No data available
<b>Flammability (solid, gas):</b>	No data available
<b>Lower &amp; Upper Flammability Limits:</b>	No data available
<b>Vapor Pressure:</b>	No data available
<b>Density:</b>	Ca. 1.08 g/cm <sup>3</sup> (20°C)
<b>Relative Density:</b>	No data available
<b>Solubility in Water:</b>	No data available
<b>Partition Coefficient (n-octanol/water):</b>	Polyether modified heptamethyltrisiloxane: log Pow: 1.42
<b>Auto-ignition Temperature:</b>	385°C
<b>Decomposition Temperature:</b>	No data available
<b>Viscosity:</b>	No data available
<b>Explosive Properties:</b>	Not explosive 92/69/EEC, A.14 / OECD 113
<b>Oxidizing Properties:</b>	No oxidizing properties

## SECTION 10: STABILITY AND REACTIVITY

Stable under recommended conditions of storage, use and transportation.

### 10.1. POSSIBILITY OF HAZARDOUS REACTIONS

Revision Date: 2023-05-22

Replaces: N/A

Reason for Revision: New Product

None under normal processing.

## 10.2. CONDITIONS TO AVOID

Extremes of temperature and direct sunlight. Freezing.

## 10.3. INCOMPATIBLE MATERIALS

Store only in original container.

## 10.4. HAZARDOUS DECOMPOSITION PRODUCTS

Under recommended storage and use conditions, no hazardous decomposition products should appear. In case of fire, see Section 5.

# SECTION 11: TOXICOLOGICAL INFORMATION

## 11.1. INFORMATION ON TOXICOLOGICAL EFFECTS

### Test

### Results

**Acute oral LD<sub>50</sub>**

> 5,000 mg/kg (rat)

**Acute dermal LD<sub>50</sub>**

> 5,000 mg/kg (rat)

**Acute inhalation LC<sub>50</sub>**

No relevant route of exposure for this formulation. No volatility, no aerosol under normal conditions.

**Skin corrosion/irritation:**

Slight irritant effect (rabbit)

**Serious eye**

Severe eye irritation (rabbit)

**damage/irritation:**

**Respiratory/skin**

Skin: Sensitizing (mouse)

**sensitization:**

OECD Test Guideline 429, local lymph node assay (LLNA)

Skin: Sensitizing (guinea pig)

OECD Test Guideline 406, Buehler test

**Germ cell mutagenicity:**

*Purpureocillium lilacinum* 251 was not mutagenic or genotoxic in a battery of *in vitro* and *in vivo* tests

Not mutagenic in Ames Test

**Carcinogenicity:**

Test not required for microorganisms

**Reproductive toxicity:**

Test not required for microorganisms

**STOT-single exposure:**

*Purpureocillium lilacinum* 251 did not cause specific target organ toxicity in experimental animal studies.

**STOT-repeated exposure:**

*Purpureocillium lilacinum* 251 did not cause specific target organ toxicity in experimental animal studies.

**Aspiration hazard:**

Based on available data, the classification criteria are not met

**Other information:**

No further information

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. TOXICITY

Species	Test	Study Duration	Conditions	Test substance	Results
Rainbow trout ( <i>Oncorhynchus mykiss</i> )	Acute freshwater fish	96-hour		Main component	LC <sub>50</sub> = 2.1 mg/L
Water flea ( <i>Daphnia magna</i> )	Acute freshwater invertebrate	48-hour		Main component	LC <sub>50</sub> = 1.1 mg/L
Green algae ( <i>Desmodesmus subspicatus</i> )	Algal toxicity	72-hour		Main component	Biomass EC <sub>50</sub> = 28.2 mg/L Growth EC <sub>50</sub> = 152.2 mg/L

### 12.2. PERSISTENCE AND DEGRADABILITY

Polyether modified heptamethyltrisiloxane is not rapidly biodegradable.

### 12.3. BIOACCUMULATIVE POTENTIAL

*Purpureocillium lilacinum* does not bioaccumulate.

### 12.4. MOBILITY IN SOIL

*Purpureocillium lilacinum* is immobile in soil.

### 12.5. RESULTS OF PBT AND VPVB ASSESMENT

Not considered to be a PBT and vPvB substance.

### 12.6. OTHER ADVERSE EFFECTS

If the product has escaped into a water course, into a drainage system, or has contaminated the ground or vegetation in exceeded quantity, notify the competent authorities.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. WASTE TREATMENT METHODS

**Product:** In accordance with current regulations and, if necessary, after consultation with the site operator and/or with the responsible authority, the product may be taken to a waste disposal site or incineration plant.

**Contaminated packaging:** Triple rinse containers. Do not re-use empty containers. Not completely emptied packagings should be disposed of as hazardous waste.

**Waste key for the unused product:** 02 01 08\* agrochemical waste containing hazardous substances.

## SECTION 14: TRANSPORTATION INFORMATION

### 14.1. ADR/RID/ADN

UN number: 3082  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYETHERSILOXANE)  
 Transport hazard class(es): 9  
 Packaging Group: III  
 Environm. Hazardous Mark: YES  
 Hazard No.: 90  
 Tunnel Code: -

This classification is in principle not valid for carriage by tank vessel on inland waterways. Please refer to the manufacturer for further information.

### 14.2. IMDG

UN number: 3082  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYETHERSILOXANE)  
 Transport hazard class(es): 9  
 Packaging Group: III  
 Marine pollutant: YES

### 14.3. IATA

UN number: 3082  
 Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (POLYETHERSILOXANE)  
 Transport hazard class(es): 9  
 Packaging Group: III  
 Environm. Hazardous Mark: YES

## SECTION 15: REGULATORY INFORMATION

### 15.1. EU

CLP Regulation (EC) No 1272/2008. The Safety Data Sheet of this product and related Classification are in accordance with EU Regulations:

CLP Regulation (EC) 1272/2008 on classification, labeling, and packaging of substance and mixtures, amending and repealing Directives 67/548/EC and 1999/45/EC, and amending Regulation (EC) 1907/2006.

Regulation (EU) 453/2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Regulation (EU) 453/2010 ANNEX II: Requirements for the compilation of safety data sheets.

Revision Date: 2023-05-22

Replaces: N/A

Reason for Revision: New Product



Regulation (EC) 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

Directive 1999/45/EC concerning the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labeling of dangerous preparations.

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#### 15.2. CANADA

WHMIS Statement: This product has been classified in accordance with the hazard criteria of the Controlled Member States relating to the classification, packaging and labeling of dangerous preparations.

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#### 15.3. USA

EPA/FIFRA: This product is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements may differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticidal chemicals. The pesticide label also includes other important information, including directions for use. The hazard information required on the pesticide label is reproduced below.

**Signal Word:** Warning / Aviso

**Hazard Statements:** Causes substantial but temporary eye injury. Causes skin irritation. Harmful if inhaled, swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Avoid breathing spray mist. Wear protective eyewear and gloves. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse. Prolonged or frequently repeated skin contact to the undiluted product may cause allergic reactions in some individuals.

California Proposition 65.

SARA 313, section 313 of the Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA).

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#### 15.4. BRAZIL

Federal Decree 2.657/1998

ABNT-NBR 14725 Standard

Ordinance n° 229 of 2011 - Amending the Regulatory Standard n° 26

Joint Normative Instruction No. 3 of 2006

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#### 15.5. URUGUAY

Resolution MGAP N° 688 04-10-2013 (MGAP: Ministry of Livestock, Agriculture and Fisheries)

## SECTION 16: OTHER INFORMATION

WHO-Classification: III (Slightly hazardous). A chemical safety assessment is not required.

**ABBREVIATIONS**

OSHA	US Occupational Health and Safety Administration
EPA	US Environmental Protection Agency
FIFRA	Federal Insecticide, Fungicide, and Rodenticide Act
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)
CWA	Clean Water Act
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
SDWA	Safe Drinking Water Act
TSCA	Toxic Substances Control Act
MCL	Maximum contaminant limit
PEL	Permissible exposure limit
STOT	Specific target organ toxicity
TLV	Threshold limit value
TWA	Time-weighted average
LD <sub>50</sub>	Median lethal dose: dose resulting in 50% mortality in the test species
LC <sub>50</sub>	Median lethal concentration: concentration resulting in 50% mortality in the test species
EC <sub>50</sub>	Median effective concentration: concentration resulting in 50% reduction in algae growth or algae growth rate, or <i>Daphnia</i> immobilization
PPE	Personal protective equipment
PBT	Persistent, bioaccumulative, and toxic
vPvB	Very persistent, very bioaccumulative
MARPOL 73/78	International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978 ( <u>Marine Pollution 1973/1978</u> ,

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