

Precautionary Statements  
Hazards to Humans and Domestic Animals  
CAUTION

Causes moderate eye irritation. Avoid contact with eyes, skin, or clothing. Use rubber gloves when handling. Harmful if swallowed. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

FIRST AID

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing. Call a poison control center or doctor for treatment advice.

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Directions for Use

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

*PPM* is a broad-spectrum preservative and biocide. *PPM* is an excellent preservative agent that can be used in research and commercial laboratories to inhibit the growth of, or kill bacteria and fungi in plant tissue culture growth media. It targets fundamental enzymes in the Krebs cycle and in the Electron Transport Chain. Depending on the dose level, *PPM* is both biocidal (>2ml/L of media) and biostatic (<2ml/L of media). When diluted with plant growth media (5-20 ml/L) *PPM*/liter growth media is effective as a microbiocide against non-human health pathogenic organisms.

1. Media containing *PPM* may be dispensed outside the laminar flow hood (LFH) exposed to the ambient air. The plates should be covered soon after agar solidification. In the event a pump dispenses the media, we recommend passing autoclaved hot water through the hoses before and after dispensing media.

2. Heat sensitive or heat stable liquid media containing *PPM* does not need to be filter sterilized or autoclaved provided that it will be stored in sterile containers and that the stock solutions are not contaminated. In rich media containing 200 mg/liter or more of amino acids or proteins, it is recommended to filter the media with the *PPM*

**PPM**

**Preservative for Plant Tissue Culture Media**

**ACTIVE INGREDIENTS:**

5-Chloro-2-methyl-3(2H)-isothiazolone..... 0.1305%

2-methyl-3(2H)-isothiazolone..... 0.0459%

**INERT INGREDIENTS..... 99.8236%**

**KEEP OUT OF REACH OF CHILDREN**

**CAUTION**

**EPA REG. NO. 71806-1 EPA EST NO.71806-DC-001**

3. Working in the LFH the utensils (forceps or scalpels) do not need to be flamed. They may be periodically dipped in 70% alcohol. The LFH does not need to be certified and the work can also be done outside the LFH on a clean surface for a period not exceeding 2 - 3 hours.

4. *PPM* comes in an acidic liquid solution (pH 3.8) and should be stored at 4°C. The recommended dose is 0.5 - 2.0 ml of *PPM* per liter of medium. Higher doses are required to treat endogenous contamination or to obtain *Agrobacteria* free plant material.

5. *PPM* is less effective when exposed to high density of bacteria or fungi spores found regularly on a seed's coat. For *in vitro* germination, seeds should be conventionally surface sterilized with EPA registered bleach. Therefore, in the presence of *PPM* (in the germination medium), the seeds can be rinsed under tap water in a non-sterile strainer and left to dry preferably in the LFH. Protoplast isolation solution should be sterilized mechanically through Millipore filters with the *PPM*. If the utensil ends have touched active bacteria, fungi culture or otherwise suspected of being contaminated, they should be sterilized by autoclave or by use of an electric heating element.

6. *Endogenous Contamination:* Plant tissue culture media containing *PPM* at doses of 5-20 ml/l can be used to eliminate endogenous contamination in seeds and plant-explants. In such cases, the seeds or the explants should be treated with an EPA registered plant disinfectant. After rinsing with DD water, explants or buds should be embedded or placed in autoclaved semisolid or liquid medium respectively. The proper media such as callus proliferation or regeneration can be used with only ¼ strength of the inorganic salts, supplemented with 5-20 ml/l *PPM*/media mixture. After 2-5 days the explants can be transferred without rinsing into a similar media (full strength inorganic salts) supplemented with at least 0.5 ml/l *PPM* at 20-24 degrees centigrade. Seeds can be transferred to germination medium (full strength of inorganic salts) supplemented with 0.5 ml/l *PPM* after 5-10 days.

It is up to the researchers to determine the optimal combination of *PPM* doses and time exposure. Different plant types and different explant sources are highly varied in their response to *PPM*.

**Storage and Disposal**

Do not contaminate water, food, or feed by storage and disposal. Storage: Ideal storage temperature is 39°F (4° C). Do not store at temperatures in excess of 70°F (21°C).

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility

Container Disposal: Nonrefillable container. Do not reuse or refill this container. Triple rinse as follows: Fill container 1/4 full with water and recap. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinsate disposal. Repeat procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

**NET CONTENTS:**

**PLANT CELL TECHNOLOGY, INC.**

1823 Jefferson Place, NW

WASHINGTON, DC 20036

Patent No. 5,750,402

[See insert for additional (precautionary statements and) directions for use.]

**ACCEPTED**

**Dec 14, 2016**

Under the Federal Insecticide, Fungicide  
and Rodenticide Act as amended, for the  
pesticide registered under  
EPA Reg. No. **71806-1**