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%

Phone:  +1 202-778-8522
Fax:     +1-202-429-9812
mkalin@mktechnology.com

Keep out of reach of children
CAUTION

Net Contents: 33.8 fl. oz (1000ml)
Expiration Date: Aug 2017

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.

Storage: Ideal storage temperature is 39°F (4°C). Do not store at temperatures in excess of 70°F (21°C).

EPA Reg. No. 71806-1
EPA Est. No. 90849-NJ-001

See inserts for additional precautionary statements and directions for use.
PPM™ – Preservative for Plant Tissue Culture

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 0.34 fl. oz (10ML) EPA Est. No.: 71806-DC-001

See insert for additional precautionary statement and directions for use.
Plant Cell Technology, Inc. Tel. +1(202)778-8522
PPM™ – Preservative for Plant Tissue Culture

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  1.01 fl. oz (30ML) EPA Est. No.: 71806-DC-001
See insert for additional precautionary statement and directions for use.
Plant Cell Technology, Inc. Tel. +1(202)778-8522
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%

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CAUTION

Expiration Date:
Net Contents: 3.38 fl. oz (100ml)
Aug 2017

EPA Reg. No. 71806-1
EPA Est. No. 71806-DC-001
See insets for additional precautionary Statements and directions for use.
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%

Phone:  +1 202-778-8522
Fax:     +1-202-429-9812
mkalin@mktechnology.com

Keep out of reach of children
CAUTION
Net Contents: 8.45 fl. oz (250ml)
Expiration Date: Aug 2017

EPA Reg. No. 71806-1
See insets for additional precautionary Statements and directions for use.

EPA Est. No. 71806-DC-001
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
Net Contents: 16.9 fl oz (500 ml)
Expiration Date: Aug 2017

Phone: +1 202-778-8522
Fax: +1-202-429-9812
mkalin@mktechnology.com

EPA Reg. No. 71806-1
See insets for additional precautionary Statements and directions for use.

EPA Est. No. 71806-DC-001
PPM
Providing for Plant Tissue Culture Media

ACTIVE INGREDIENTS:
5-Chloro-2-ethyl-3(2H)-isothiazolone ........ 0.1305%
2-ethyl-3(2H)-isothiazolone ............... 0.0456%
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 ustensils (forceps or scalpels) do not need to be sterilised. 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 Agrobacterium 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 sterilised mechanically through Millipore filters with the PPM. If the ustensils ends have touched active bacteria, fungi culture or otherwise suspected of being contaminated, the 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 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 30°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 recup. Shake for 10 seconds. Drain for 10 seconds after the flow begins to drip. Follow Pesticide Disposal instructions for rinseate disposal. Repeat procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration.

PLANT CELL TECHNOLOGY, INC.
1823 Jefferson Place, NW
WASHINGTON, DC 20035
Patent No. 5,750,412

Insert 12/02/2016