



## MATERIAL SAFETY DATA SHEET

### Plant Cell Technology, Inc.

1823 Jefferson Place, NW

Washington, DC 20036

202-778-8522 Ext. 115

### PPM - Plant Preservative Mixture™

#### 1. IDENTIFICATION

Chemical Name: **Plant Preservative Mixture (PPM)™**

Chemical Family: Proprietary

MSDS Date: 2/17/98

CAS#: Proprietary (Several #s)

Synonyms: N/A

DOT Information: Not Corrosive (pH = 3.7)

Hazard	Rating	Scale
Oral Toxicity	4	4=INSIGNIFICANT/NONE
Eye/Skin Toxicity/Irritation	3 (Caution)	3=MODERATE
Fire	4	2=HIGH
Reactivity	4	1=EXTREME/CORROSSIVE

The above rating is Plant Cell Technology's toxicity rating. It incorporates some EPA criteria.

#### COMPANY IDENTIFICATION

Plant Cell Technology, Inc., 1823 Jefferson Pl, NW

Washington, DC 20036

202-778-8522 Ext. 121 (Martin Kalin) 856-858-5551 (Dr. Assaf Guri)

*PPM is a trademark of Plant Cell Technology, Inc.*



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### 2. PHYSICAL DATA

Appearance	.	.	.Clear
Color	.	.	.Amber to clear
State	.	.	.Liquid
Odor Characteristic	.	.	.Mild, inoffensive odor
pH	.	.	3.0 - 4.0
Solubility in Water	.	.	Completely soluble

### 3. INGREDIENTS

PPM is a proprietary chemical product.

### 4. FIRE AND EXPLOSION HAZARD DATA

Flash Point Not Applicable

Auto-ignition Temperature Not Applicable

Lower Explosive Limit Not Applicable

Upper Explosive Limit Not Applicable

#### Unusual Hazards

Combustion generates toxic fumes of the following: hydrogen chloride, nitrogen oxides, sulfur oxides

#### Extinguishing Agents

Use extinguishing media appropriate for surrounding fire.

#### Personal Protective Equipment

Wear self-contained breathing apparatus (pressure-demand MSHA/NIOSH approved or equivalent) and full protective gear.

#### Special Procedures

Use water spray to cool containers exposed to fire. Minimize exposure. DO NOT breathe fumes. Contain run-off.



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#### 5. HEALTH HAZARD DATA

Inhalation: Inhalation of vapor or mist can cause the following: irritation to nose and throat

Eye Contact

Material can cause the following: corrosion to eyes - permanent, irreversible eye injury

Skin Contact

Skin irritation effects can be delayed for hours. Material can cause the following: irritation to the skin, allergic contact dermatitis

Ingestion

Material is harmful if swallowed.

#### 6. FIRST AID MEASURES

Inhalation

Move subject to fresh air. Give artificial respiration if breathing has stopped.

Ingestion

If swallowed, give 2 glasses of water to drink. IMMEDIATELY see a physician. Never give anything by mouth to an unconscious person.

Eye and Skin Contact

IMMEDIATELY flush eyes with a large amount of water for at least 15 minutes. Wash affected skin areas thoroughly with soap and water. Remove and wash contaminated clothing thoroughly. Do not take clothing home to be laundered. Discard contaminated shoes, belts and other articles made of leather. Get prompt medical attention.

Note to Physician:

MATERIAL HAS a pH OF 3.0 - 4.0. It may be advisable to induce vomiting. Possible mucosa damage may contraindicate the use of gastric lavage. Measures against circulatory shock and convulsions may be necessary.

#### 7. REACTIVITY DATA

- This material is considered stable under specified conditions of storage, shipment and/or use.



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- Thermal decomposition may yield the following: hydrogen chloride, sulfur dioxide, oxides of nitrogen
- Hazardous Polymerization: Production will not undergo polymerization.
- *Incompatibility:* Avoid contact with the following: oxidizing agents, reducing agents, amines, mercaptans

### 8. SPILL OR LEAK PROCEDURES

Dilute with 100X water. Rinse decontaminated solution to a chemical sewer.

### 9. SPECIAL PROTECTION INFORMATION

Personal Protection

- Wear compatible, chemically resistant gloves.
- Material has a pH of 3.0 - 4.0. If exposed to material during clean-up operations IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures, for further information.
- Protective clothing made of the following material should be worn to avoid skin contact: butyl rubber or nitrile

Engineering Controls (Ventilation)

Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evaluation. Refer to the current edition of Industrial Ventilation: A Manual or Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Other Protective Equipment

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.



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#### 10. HANDLING AND STORAGE

##### Storage Conditions

The maximum recommended storage temperature for this material is 55C/131F. The minimum recommended storage temperature for this material is 0 C/32F. Store in a well ventilated area. Do not store this material in containers made of steel

##### Handling Procedures

See Exposure Controls/Personal Protection prior to handling. Since emptied containers retain product residue (vapors and/or liquid) follow all MSDS and label warning even after container is emptied.

#### 11. REGULATION INFORMATION

Workplace Classification: This product is considered non-toxic.

#### 12. TOXICOLOGICAL INFORMATION

Oral LD50 - rat: 30g/kg

Eye/Skin Irritation – rabbit: moderate irritation/insult, reversible damage

Sensitization Data: Human - Allergic contact dermatitis possible.

#### 13. ECOLOGICAL INFORMATION Not Available

#### 14. DISPOSAL CONDITIONS

Dispose of PPM-containing media as you would non-PPM media. Items that are contaminated with full strength PPM should be rinsed liberally (100X) in water. See Item #8 above.

#### 15. TRANSPORTATION INFORMATION

US DOT Hazard Class = Non-Toxic. Classified as a skin irritant.

The information contained herein relates only to the specific material identified. Plant Cell Technology, Inc. believes that such information is accurate and reliable as of the date of this material safety data sheet, but no representation, guarantee or warranty, express or implied, is made as the accuracy, reliability, or completeness of the information. Our company urges persons receiving this information to make their own determination as to the information's suitability and completeness for their particular application.