Plant Preservative Mixture (PPM™)	
Safety Data Sheet	**PPM-SDS**

1. Identification

Production Name: Plant Preservative Mixture (PPM™)

Catalog Number: PPM

SKU: PPM30, PPM100, PPM250, PPM500, PPM1L

Company: Plant Cell Technology

Address: 836 South 100 East, Smithfield UT 84335

Telephone: 435.534.8700

Emergency Contact, US: CHEMTREC 800.424.9300 (24/7)

Emergency Contact, International: CHEMTREC 703.527.3887 (24/7)

Regulatory Information:

EPA Establishment Number: 71806-UT-1

EPA Product Registration Number: 71806-DC- 001

Recommended Use: For research and laboratory use only.

Restrictions on Use: This product is intended for research and laboratory use only. This product is not to be used as human or animal therapeutics, cosmetics, pesticidal products, food additives, or household chemicals.

2. Hazards Identification

Classification of the Substance or Mixture

GHS Classification:

H317 – Skin corrosion/irritation (Category 1)

H334 – Sensitization, respiratory (Category 1)

GHS Label Elements, Including Precautionary Statements

Signal Word: Danger

Hazard Statements:

H317 – May cause an allergic skin reaction

H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements:

P261 – Avoid breathing vapors.

P272 – Contaminated work clothing should not be allowed out of the workplace.

P280 – Wear protective equipment.

P284 – In case of inadequate ventilation, wear respiratory protection.

P302 + P352 – IF ON SKIN: Wash with plenty of water.

P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P333 + P313 – IF SKIN irritation or rash occurs: Get medical advice/attention.

P342 + P311 – IF experiencing respiratory symptoms: Call a POISON CENTER/doctor.

P362 + P364 – Take off contaminated clothing and wash it before reuse.

Pictograms:



3. Composition / Information on Ingredients

Synonyms: PPM™

Formula: N/A

Molecular Weight: N/A

CAS-No: N/A

EC-No: N/A

Component	CAS Number	EC Number	Concentrations (%, w/w)	Classification
Proprietary Ingredient*	Not Available	Not Available	0.01 – 0.5	Acute Tox. 4 (Oral) H302 Acute Tox. 4 (Inhalation: dust, mist), H332 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317

*This information has been withheld as a trade secret

4. First Aid Measures

General Advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Route of Exposure

If Swallowed: Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention.

In Case of Skin Contact: Wash area thoroughly with soap and water. Remove and wash contaminated clothing. Get medical attention if irritation persists.

In Case of Eye Contact: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Ensure adequate flushing by separating the eyelids. Get medical attention if irritation persists.

If Inhaled: Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway. Get medical attention.

Most Important Symptoms and Effects, Both Acute and Delayed: The most important known symptoms and effects are described in Section 2 (Hazards Identification) and/or in Section 11 (Toxicological Information).

Recommendation for Immediate Medical Care and Special Treatment Needed: No Data Available

5. Firefighting Measures

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

Unsuitable Extinguishing Media: Do not use a heavy water stream.

Special Protective Equipment and Precautions for Firefighters: Do not enter fire area without proper protective equipment, including respiratory protection.

Special Hazards Arising from the Substance or Mixture: Carbon monoxide, Carbon dioxide

Additional Information: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Contain water used for fire-fighting to the greatest extent possible.

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Evacuate personnel to safe areas. Use personal protective equipment. Ventilate area. Avoid breathing vapors, mist or gas. Dilute with 100X water.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters. See Section 2 (Hazards Identification) for more information.

Methods and Material for Containment and Cleanup: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

7. Handling and Storage

Precautions for Safe Handling: Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Avoid breathing vapors. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

Conditions for Safe Storage: Keep only in the original container in a cool, well ventilated place. Keep out of direct sunlight and away from ignition sources. Ideal storage temperature is 4°C. Do not store at temperatures in excess of 21°C.

Recommended Storage Temperature: 2° to 8°C

Incompatibilities: Direct sunlight, Sources of ignition, Strong acids, Strong bases

8. Exposure Controls / Personal Protection

OSHA Permissible Exposure Limits (PELs): Follow all applicable federal, state, and local regulations in regard to Permissible Exposure Limits (PELs).

ACGIH Threshold Limit Values (TLVs): Follow all applicable federal, state, and local regulations in regard to Threshold Limit Values (TLVs).

Engineering Controls: Practice general industrial hygiene. Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment (PPE):

> **Eye/Face Protection**: Face shield or appropriate safety glasses. Use equipment for eye protection tested and approved under appropriate standards.

Skin Protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Respiratory Protection: Respiratory protection is not required. Where protection from nuisance levels of dusts or vapors is desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate standards.

Body Protection: Wear lab coat, gown, or coveralls to protect from exposure.

9. Physical and Chemical Properties

Appearance: Clear, Colorless to Light Amber Liquid

Boiling Point, Initial: No Data Available

Boiling Range: No Data Available

Evaporation Rate: No Data Available

Flammability (Solid, Gas): Not Applicable

Flammability Lower Limit: No Data Available

Flammability Upper Limit: No Data Available

Flash Point: Not Applicable

Freezing Point: No Data Available

Melting Point: No Data Available

Melting Range: No Data Available

Odor: Mild

Odor Threshold: No Data Available

Partition Coefficient: No Data Available

pH: 3.8

Relative Density: No Data Available

Solubility: Infinitely Soluble in Water

Specific Gravity: No Data Available

Temperature, Auto-Ignition: No Data Available

Temperature, Decomposition: No Data Available

Vapor Density: No Data Available

Vapor Pressure: No Data Available

Viscosity: No Data Available

10. Stability and Reactivity

Reactivity: No Data Available

Chemical Stability: Stable under recommended storage conditions.

Possibilities of Hazardous Reactions: No Data Available

Conditions to Avoid: Direct sunlight, Extremely high or low temperatures

Incompatible Materials: Sources of ignition, Strong acids, Strong bases

Hazardous Decomposition Products: Hazardous decomposition products formed under fire conditions. – Carbon monoxide, Carbon dioxide

In the event of fire, see Section 5 (Firefighting Measures).

11. Toxicological Information

Toxicity: PPM™ (Plant Preservation Mixture):

LD50 (Oral - Rat): 30 g/kg

ATE US (oral): 30000.000 mg/kg body weight

Proprietary Ingredient:

LD50 (Oral - Rat): 481 mg/kg

LC50 (Inhalation - Rat): 1.23 mg/l/4h

ATE US (Oral): 481.000 mg/kg body weight

ATE US (Vapors): 1.230 mg/I/4h

ATE US (Dust, mist): 1.230 mg/I/4h

Carcinogenicity:

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: No Data Available

Immediate Effects of Exposure: No Data Available

Delayed Effects of Exposure: No Data Available

Chronic Effects of Short Term Exposure: No Data Available

Chronic Effects of Long Term Exposure: No Data Available

Symptoms Associated with Overexposure: May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Specific Target Organ Toxicity – Single Exposure: No Data Available

Specific Target Organ Toxicity – Repeated Exposure: No Data Available

Target Organs: None Identified

Medical Conditions Aggravated by Exposure: None Identified

Routes of Entry: Eye contact, Ingestion, Inhalation, Skin contact

Likely Routes of Exposure:

Eye Contact: No Data Available

Ingestions: No Data Available

Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin Contact: May cause an allergic skin reaction.

NIOSH/RTECS: N/A

12. Ecological Information

Toxicity: Information on Proprietary Ingredient:

LC50 Fish 1 – 1.6mg/l (Exposure time: 96 h – Species: Oncorhynchus mykiss [semi-static])

EC50 Daphnia 1 – 4.71 mg/l (Exposure time: 48 h – Species: Daphnia magna)

ED50 Daphnia 2 – 0.12 – 0.3 mg/l (Exposure time: 48 h – Species: Daphnia magna [Flow through])

Persistence and Degradability: No Data Available

Bioaccumulative Potential: PPM – No Data Available

Proprietary Ingredient – Log Pow: -0.71 – 0.75 (at 20°C)

Mobility in Soil: No Data Available

Results of PBT and vPvB: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other Adverse Effects: Avoid release into the environment.

13. Disposal Considerations

Disposal of Product: Dispose in accordance with all applicable federal, state, and local environmental regulations. Avoid release to the environment. See Section 2 (Hazards Identification) for additional guidelines in disposals.

Disposal of Packaging: Dispose of as unused product.

14. Transport Information

DOT (US):

Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

UN/NA number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

Reportable Quantity (RQ): N/A

Poison Inhalation Hazard: N/A

IMDG:

Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

UN number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

IATA:

Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)

UN Number: N/A Class: N/A Packaging group: N/A Hazard Label: N/A

15. Regulatory Information

TSCA: Listed

SARA Title lll:

Section 302 (EHS) Ingredients: None

Section 304 (EHS/CERCLA) Ingredients: None

Section 311/312 Hazard: Acute Health Hazard

Section 313 Ingredients: None

International Regulations:

Canada: Proprietary Ingredient is listed on the Canadian DSL (Domestic Substances List)

EU: Proprietary Ingredient is listed on the EEC Inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

National Regulations:

Proprietary ingredient is listed on the following:

AICS (Australian Inventory of Chemical Substances)

IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)

Japanese ENCS (Existing & New Chemical Substances) Inventory

Korean ECL (Existing Chemicals List)

NZIoC (New Zealand Inventory of Chemicals)

PICCS (Philippines Inventory of Chemicals and Chemical Substances)

INSQ (Mexican National Inventory of Chemical Substances)

Turkish Chemical Substance Inventory

Classification according to Regulation (EC) No. 1272/2008 [CLP]: No additional information available

Classification according to Directive 67/548/EEC [DSD] or 199945/EC [DPD]: No additional information available

US State Regulations: No additional information available

16. Other Information

Further Information:

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

PPM™ is formulated by Plant Cell Technology, Inc.

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(202) 778-8522

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836 S 100 E

Smithfield, UT 84335

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EPA Reg. No. 71806-1

EST No: 71806-UT-1 & 71806-DC-1

All chemicals may pose unknown hazards and should be used with caution. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Plant Cell Technology, Inc, assumes no responsibility for the completeness or accuracy of the information contained herein.

PPM-SDS Revision Change Summary:

Rev.	Date	CR#	Approved	Change description
00	05-May-25	0011	C. Gallagher	New Document