



**PhytoTechnology  
Laboratories®**

# SAFETY DATA SHEET

## 1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME: Acetosyringone 100 mM Solution  
PRODUCT NUMBER: A1104  
COMPANY INFO: *PhytoTechnology Laboratories®*  
PO Box 12205, Shawnee, KS 66282-2205  
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442  
www.phytotechlab.com

EMERGENCY PHONE NUMBER: 1-800-535-5053 - US Only  
1-352-323-3500 - International

RECOMMENDED USE: For Research Use Only

RESTRICTIONS ON USE: Products sold by *PhytoTechnology Laboratories®* are intended for research and laboratory use only. Products are not to be used as human or animal therapeutics, cosmetics, agricultural or pesticidal products, food additives, or as household chemicals.

## 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification:

- H315 – Skin irritation (Category 2)
- H319 – Eye Irritation (Category 2A)
- H335 – Specific target organ toxicity – Respiratory System – single exposure (Category 3)

GHS Label elements, including hazard and precautionary statements:

Pictogram:



Signal Word: **Warning**

Hazard Statements:

- H302 – Harmful if swallowed.
- H315 – Causes skin irritation.
- H319 – Causes serious eye irritation.
- H335 – May cause respiratory irritation.

Precautionary Statements:

- P261 – Avoid breathing fume/vapours.
- P280 – Wear protective gloves/protective clothing/eye protection/face protection.
- P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: 4-Hydroxy-3',5'-dimethoxyacetophenone  
CAS No.: 2478-38-8  
Formula: C<sub>10</sub>H<sub>12</sub>O<sub>4</sub>  
Molecular Weight: 196.20 g/mol  
EC No.: 219-610-5

Ingredient	CAS Number	Percent	Hazardous
Acetosyringone	2478-38-8	1.93%	No exposure limits established by OSHA or ACGIH
Dimethyl Sulfoxide	67-68-5	98.07%	No exposure limits established by OSHA or ACGIH

#### 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 Entry	Symptoms	First Aid Procedures
Ingestion	May cause irritation if swallowed	If swallowed, wash out mouth with water. Never give anything by mouth to an unconscious person. <b>Get medical attention.</b>
Inhalation	May cause irritation to respiratory tract	Safely remove victim to fresh air. If not breathing, institute cardiopulmonary resuscitation (CPR). If breathing is difficult, ensure clear airway and give oxygen. <b>Get medical attention.</b>
Eye Contact	Direct contact may cause irritation. May cause redness, tearing, or blurred vision.	Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. <b>Get medical attention if irritation persists.</b>
Skin Contact	Irritating. May cause reddening, itching or inflammation.	Wash area thoroughly with soap and water. Remove and wash contaminated clothing. <b>Get medical attention if irritation persists.</b>

Most Important Symptoms or Effects, Both Acute and Delayed:

See section 2 and/or section 11

Recommendation for Immediate Medical Care and Special Treatment Needed:

No data available

#### 5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray, carbon dioxide, dry chemical powder, or appropriate foam. Use extinguishing media suitable for surrounding fire.

Special Protective Equipment and Precaution for Firefighters: In the event of a fire, wear full protective clothing and NIOSH approved self-contained breathing apparatus. Evacuate the area and fight fire from a safe distance.

Hazardous Combustion Products: May emit toxic fumes under fire conditions. Above 87 C, explosive vapor/air mixtures may be formed

Toxic Gases Produced: Carbon dioxide, carbon monoxide, sulfur oxides, formaldehyde, methyl mercaptan

#### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid breathing vapours, mist or gas. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to safe areas.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Method of Containment and Cleanup: Clean-up personnel should wear proper protective equipment and clothing. Contain spilled material and do not let product enter drains. Soak up with inert absorbent material and place in a suitable, closed container for disposal in accordance with all local, state/provincial, and national requirements. Ventilate the area if necessary.

#### 7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Wash thoroughly after use.

Conditions for Safe Storage: Keep in a tightly closed container and store in a cool, dry, and well-ventilated area.

Incompatibilities: Strong bases, Strong oxidizing agents, copper wool, trichloroacetic acid, potassium permanganate, acid halides, cyanuric chloride, silicon tetrachloride, methyl bromide, sodium hydride, iodine pentafluoride, silver fluoride, magnesium perchlorate,

phosphorus trichloride, perchloric and periodic acids

Recommended Storage Temperature: 2 to 6 °C

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA's Permissible Exposure Limits (PELs): No data available

Threshold Limit Values (TLVs): No data available

Engineering Controls: Handle in accordance to general industrial hygiene and safety practice.

Personal Protective Equipment (PPE):

Eye/Face Protection: Chemical safety glasses or goggles. Have eye-washing facilities readily available where eye contact can occur.

Skin Protection: Protective gloves

Body Protection: Lab coat

Respiratory Protection: A NIOSH/MSHA approved air purifying respirator is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Off-White to Tan, Clear Liquid

pH (0.05 g/L): Under Development

Solubility: Miscible in Water

Melting Point: 125-127 °C

Vapor Density: No data available

Vapor Pressure: No data available

Odor: Odorless

Odor Threshold: No data available

Viscosity: No data available

Relative Density: No data available

Evaporation Rate: No data available

Initial Boiling Point and Boiling Range: No data available

Flammability (solid, gas): No data available

Partition coefficient: No data available  
n-octanol/water):

Auto-ignition Temperature: No data available

Decomposition Temperature: No data available

Flash Point (Closed Cup): No data available

Flammable Limits: Upper (%) – No data available      Lower (%) – No data available

## 10. STABILITY AND REACTIVITY

Reactivity: No data available

Chemical Stability: Stable

Possibility of Hazard Reactions: Has not been reported

Conditions to Avoid: Air, moisture, source of ignition, high temperatures

Incompatibles Materials: Strong bases, Strong oxidizing agents, copper wool, trichloroacetic acid, potassium permanganate, acid halides, cyanuric chloride, silicon tetrachloride, methyl bromide, sodium hydride, iodine pentafluoride, silver fluoride, magnesium perchlorate, phosphorus trichloride, perchloric and periodic acids

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide

## 11. TOXICOLOGICAL INFORMATION

Toxicity: LD<sub>50</sub> (Oral-Rat)(g/Kg): 14,500  
LD<sub>50</sub> (Oral-Mouse)(g/Kg): 200  
LD<sub>50</sub> (IV-Rat)(g/Kg): 3100

Carcinogenicity: NTP: No  
IARC: No  
Z List: No  
OSHA Reg: No

Reproductive Toxicity: No data available

Symptoms Associated with Overexposure: Irritation, nausea, vomiting, dizziness, fatigue, itching, gastrointestinal upset, dermatitis, corneal damage, possible mutagenic, tumorigenic, and reproductive effects, muscular weakness, fetal death, heart problems, cyanosis, breathing difficulties

Specific Target Organ Toxicity: Single Exposure: Inhalation – may cause respiratory irritation.  
Repeated Exposure: No data available

Target Organs: Respiratory system, skin, eyes, blood, liver, central nervous system

Medical Conditions Aggravated By Exposure: Central nervous system or cardiac impairment

Routes of Entry: Inhalation, skin and eye contact

NIOSH/RTECS NO: AM8440000

***The toxicological properties of this product have not been thoroughly investigated***

## 12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available  
Persistence and Degradability: No data available  
Bioaccumulative Potential: No data available  
Mobility in Soil: No data available  
Other Adverse Effects: No data available

## 13. DISPOSAL CONSIDERATION

Disposal Procedure: Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: No data available

## 14. TRANSPORT INFORMATION

Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

International:

IMDG: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A

UN/NA: N/A  
Labels: N/A

IATA: Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
Hazard Class: N/A  
UN/NA: N/A  
Labels: N/A

### 15. REGULATORY INFORMATION

TSCA: No

#### SARA TITLE III:

Section 302 (EHS) Ingredients: No  
Section 313 Ingredients: No  
Section 304 (EHS/CERCLA) Ingredients: No  
Section 311/312 Hazard: Acute Health Hazard

Massachusetts Right to Know Components: No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components: CAS NO.: 2478-38-8 4'-Hydroxy-3',5'-dimethoxyacetophenone

New Jersey Right to Know Components: CAS NO.: 2478-38-8 4'-Hydroxy-3',5'-dimethoxyacetophenone

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

### 16. OTHER INFORMATION

HMIS Rating:	<b>Health Hazard</b>	<b>Chronic Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>
	2		0	0
NFPA Rating:	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Reactivity Hazard</b>	<b>Special Hazard</b>
	2	0	0	

***PhytoTechnology Laboratories®* provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. The above information is intended to be used only as a guide to the appropriate precautionary handling of this material by a properly trained person. *PhytoTechnology Laboratories®* shall not be held liable for any damage resulting from handling or from contact with the above product. This product is intended for LABORATORY USE ONLY. Our products may NOT BE USED as drugs, cosmetics, agricultural or pesticidal products, food additives or as household chemicals.**

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