SAFETY DATA SHEET

1. CHEMICAL IDENTIFICATION AND COMPANY INFORMATION

PRODUCT NAME:  meta-Topolin
PRODUCT NUMBER: T841
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
(INFOTRAC):  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:

H302 + H312 + H332 – Acute toxicity, Oral (Category 4)

GHS Label elements, including hazard and precautionary statements:

Pictogram:  

Signal Word:  Warning

Hazard Statements:  H302 + H312 + H332 – Harmful if swallowed, in contact with kin or if inhaled.

Precautionary Statements:

P260 – Do not breathe dust
P280 – Wear protective gloves/protective clothing/eye protection.

Hazards not otherwise classified (HNOC) or not covered by GHS: - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms:  6-(3-Hydroxybenzylamino)purine
CAS No.:  75737-38-1
Formula:  C_{12}H_{10}N_{5}OH
Molecular Weight:  241.25

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Percent</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td>meta-Topolin</td>
<td>75737-38-1</td>
<td>&gt;99 %</td>
<td>No exposure limits established by OSHA or ACGIH</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

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

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

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.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protection recommended in Section 8. Avoid dust formation. Avoid breathing dust, vapors, 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: Wear suitable protective clothing. Avoid dust formation. Carefully sweep up and remove. Place material in a dry container and cover. Remove from the area. Flush spill area with water. Do not let product enter drains.

7. HANDLING AND STORAGE

Precaution for Safe Handling: Avoid contact with skin and eyes. Avoid dust formation and aerosols. Avoid incompatible substances. Provide adequate ventilation at places where dust is formed. Wash thoroughly after use.

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

Incompatibilities: Strong oxidizing agent, strong acids

Recommended Storage Temperature: -20°C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA’s Permissible Exposure Limits (PELs): None

Threshold Limit Values (TLVs): None
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: Respiratory protection is not required. Use N95 (US) or type P1 (EN 143) dust mask where dust level is nuisance. A NIOSH/MSHA approved air purifying respirator is recommended where airborne concentrations are expected to exceed exposure limits. Protection provided by purifying respirators is limited.

9. PHYSICAL AND CHEMICAL PROPERTIES

   Appearance: White to off-white powder
   pH (0.001 g/L): Under Development (solvent dependent)
   Solubility: Soluble in NaOH or KOH
   Melting Point: 284 – 286 °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: n-octanol/water): No data available
   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 under normal conditions of use
   Possibility of Hazard Reactions: No data available
   Conditions to Avoid: No data available
   Incompatibles Materials: No data available
   Hazardous Decomposition Products: No data available

11. TOXICOLOGICAL INFORMATION

   Toxicity: 
   LD₅₀ (Oral-Rat)(mg/Kg) No data available
   LD₅₀ (IPR-Mouse)(mg/Kg) No data available
   LD₅₀ (Dermal-Rat)(mg/Kg) No data available
Carcinogenicity: NTP: No  
IARC: No  
OSHA Reg: No  

Reproductive Toxicity: No data available  
Specific Target Organ Toxicity: 
  Single Exposure: No data available  
  Repeated Exposure: No data available  

Target Organs: No data available  
Routes of Entry: Inhalation and ingestion  
NIOSH/RTECS NO: No data available  

*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.

14. TRANSPORT INFORMATION  
Domestic (D.O.T.): Proper Shipping Name: CHEMICALS, N.O.S. (NON-REGULATED)  
  Hazard Class: N/A  
  Reportable Quantity: 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: No SARA Hazards
Massachusetts Right to Know Components: This product is not on the Massachusetts Substance List (MSL).
Pennsylvania Right to Know Components: This product is not listed on the Pennsylvania Code’s Hazardous Substance List (Chapter 323).
New Jersey Right to Know Components: This product is not listed amongst the New Jersey Right to Know Hazardous Substance Fact Sheets
California Prop. 65 Components: This product is not known to the State of California to cause cancer or reproductive toxicity.

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>HMIS Rating:</th>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Physical Hazard</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>B</td>
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</table>

<table>
<thead>
<tr>
<th>NFPA Rating:</th>
<th>Health Hazard</th>
<th>Fire Hazard</th>
<th>Instability</th>
<th>Special Hazard</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
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