**MATERIAL SAFETY DATA SHEET**

**BULKACTIVES**

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**Section 1 - Identification of Substance and Company**

**Product Name:** Pine bark extract powder (95% proanthocyanidins)

**Generic Name:** Pine bark extract powder (95% proanthocyanidins)

**Supplier:** BulkActives  
P.O Box 38-76  
Keelung City 20299  
Taiwan  
email: info@bulkactives.com

**HMIS**  
Health: 1  
Flammability: 1  
Reactivity: 0  
Gloves & Safety Glasses

**Emergency Phone Numbers:** CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300  
International CHEMTREC, call: 1-703-527-3887

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**Section 2 – Hazard Identification**

**Potential Acute Health Effects:**  
Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

**Potential Chronic Health Effects:**  
CARCINOGENIC EFFECTS: Not available.  
MUTAGENIC EFFECTS: Not available.  
TERATOGENIC EFFECTS: Not available.  
DEVELOPMENTAL TOXICITY: Not available.  
Repeated or prolonged exposure is not known to aggravate medical condition.

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**Section 3 – Information on Ingredients**

**Composition:**

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pine bark extract powder (95% proanthocyanidins)</td>
<td>90082-75-0</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Toxicological Data on Ingredients:**  
Acute toxicity(LD50): Pine Bark Extract. OPCs. LD50-Lethal dose, 50 percent kill.  
Oral: Rodent-mouse, >4000 mg/kg. LD50-Lethal dose, 50 percent kill. Oral, Rodent-rat, >4000 mg/kg.

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**Section 4 - First Aid Measures**

**Eye Contact:**  
Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.

**Skin Contact:**  
Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

**Serious Skin Contact:** Not available.

**Inhalation:**  
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If difficult breathing, give oxygen. Get medical attention.

**Serious Inhalation:** Not available.

**Ingestion:**  
Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

**Serious Ingestion:** Not available.
Section 5 - Explosion and Fire-Fighting Measures

Flammability of the Product: May be combustible at high temperature.
Auto-Ignition Temperature: Not available.
Flash Points: Not available.
Flammable Limits: Not available.
Products of Combustion: Not available.
Fire Hazards in Presence of Various Substances: Slightly flammable to flammable in presence of heat.
Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder.
LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards: Not available.
Special Remarks on Explosion Hazards: Not available.

Section 6 - Accidental Release/Spill Procedures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7 - Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Keep away from incompatibles such as oxidizing agents.
Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Do not store above 24°C (75.2°F).

Section 8 - Personal Protection

Engineering Controls:
Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection: Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill:
Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inha- lation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits: Not available.
Section 9 - Physical and Chemical Properties

Physical state and appearance: Solid. (hygroscopic fine powder) Odor: Characteristic
Taste: Characteristic
Molecular Weight: Not available. Color: reddish brown
Odor Threshold: Not available.

Section 10 - Stability and Reactivity

Stability: The product is stable.
Instability Temperature: Not available.
Conditions of Instability: Excessive heat, dust generation, open flames, source of ignition, incompatible materials (strong oxidizing agents).
Incompatibility with various substances: Reactive with oxidizing agents.
Corrosivity: Non-corrosive in presence of glass.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.

Section 11 - Toxicological Information

Routes of Entry: Inhalation. Ingestion.
Toxicity to Animals: LD50: Not available.
LC50: Not available.
Chronic Effects on Humans: Not available.
Other Toxic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Not available.
Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects:
Skin: May cause skin irritation.
Eyes: Dust may cause eye irritation.
Inhalation: Dust may cause respiratory tract irritation.
Ingestion: may cause digestive tract irritation.
Chronic Potential Health Effects: no information found.
The toxicological properties of this substance have not bee fully investigated.
Section 12 - Ecological Information

Ecotoxicity: Not available.
BOD5 and COD: Not available.
Products of Biodegradation:
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: Not available.
Special Remarks on the Products of Biodegradation: Not available.

Section 13 - Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14 - Transport Information

DOT Classification: Not a DOT controlled material (United States).
Identification: Not applicable.
Special Provisions for Transport: Not applicable.

Section 15 - Regulatory Information

Federal and State Regulations: No products were found.
Other Regulations: Not available.
Other Classifications:
WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC):
This product is not classified according to the EU regulations. Not applicable.
HMIS (U.S.A.):
Health Hazard: 1
Fire Hazard: 1
Reactivity: 0
Personal Protection: E
National Fire Protection Association (U.S.A.):
Health: 1
Flammability: 1
Reactivity: 0
Specific hazard:
Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

Section 16 - Other Information

Prepared By: JS Revision Date: 05/14

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