# MATERIAL SAFETY DATA SHEET

## BLACK PEPPER TOTAL CO2 EXTRACT

### 1. PRODUCT NAME AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>BLACK PEPPER TOTAL CO2 EXTRACT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Use:</td>
<td>Personal Care Formulations</td>
</tr>
<tr>
<td>Company Name:</td>
<td>Natural Sourcing</td>
</tr>
<tr>
<td>Company Address:</td>
<td>341 Christian Street, Oxford, CT 06478, USA</td>
</tr>
<tr>
<td>Date Issued:</td>
<td>04/19/2011</td>
</tr>
<tr>
<td>Emergency Telephone Number:</td>
<td>Chemtrec Tel: (800) 262–8200</td>
</tr>
</tbody>
</table>

### 2. HAZARDS IDENTIFICATION

**Classifications:**

- Indications of Danger: Harmful, Irritant
- R-Phrases:
  - Irritating to eyes, respiratory system and skin
  - May cause sensitization by skin contact

**Explication of Special Hazards for Human Health and Environment:** Special skin risk by leaking/spilling product.

**Contains:**

- < 0.2% linalool (CAS No: 78–70–6)
- < 6.0% limonene (CAS No: 5989–27–5)

**MAY CAUSE ALLERGIC REACTIONS**

### 3. COMPOSITION/INGREDIENT INFORMATION

**Chemical Characterization:**

- Piper nigrum (Black Pepper) Extract, CAS No: 84929–41–9, EINECS No: 284–524–7
- Helianthus Annuus Seed Oil, CAS No: 8001–21–6, EINECS No: 232–273–9
- Lecithin, CAS No: 8002–43–5

**INCI Name:**

- Piper nigrum (Black Pepper) Extract, CAS No: 84929–41–9, EINECS No: 284–524–7
- Helianthus Annuus Seed Oil, CAS No: 8001–21–6, EINECS No: 232–273–9
- Lecithin, CAS No: 8002–43–5

**Hazardous Components:**

<table>
<thead>
<tr>
<th>Essential Oil</th>
<th>CAS No</th>
<th>EINECS No</th>
<th>Hazard Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piperine</td>
<td>94–62–2</td>
<td>202–348–0</td>
<td>Xn, Xi, R36/37/38–65</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>26–30%</td>
</tr>
</tbody>
</table>

**Further Information:**

- Contains < 20 ppm Safrole
- No Solvent Residues

### 4. FIRST AID MEASURES

**Eyes:**

Flush with plenty of water or eye wash solution for 15 minutes. Get medical attention if irritation persists.

**Skin:**

Wash with soap and water. Seek medical attention if irritation persists.
5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry Chemical, Carbon Dioxide, Foam
- Do Not Use Water Except to Cool Containers.

Special Firefighting Procedures: In case of fire, wear self-contained breathing apparatus.

Unusual Fire & Explosion Hazards: Formation of dangerous fumes possible.

6. ACCIDENTAL RELEASE MEASURES (STEPS FOR SPILLS)

Personal Protection: Avoid contact with skin and eyes, concentrated extracts should not be swallowed.

Environmental Protection: Keep away from canalization, waterway, and groundwater.

Methods for Cleaning Up: Remove mechanically, placing in appropriate containers for disposal.

7. HANDLING AND STORAGE

Handling

Safe Handling: Avoid contact with skin and eyes, concentrated extracts should not be swallowed. Wear splash goggles and oil resistant gloves.

Storage

Requirements for Storage Areas and Containers: Store in a cool, dry location, in a sealed container, away from sunlight. Avoid heat.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Eye: Wear splash goggles.

Skin/Body: Wear oil resistant gloves. Remove contaminated clothing.

Respiratory: Do not breathe vapor/aerosol.

Ventilation: Area should be well ventilated.

Other: Evaluate need based on application.

Work/Hygiene Practice: Normal work and hygiene practices

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Suspension with sediment

Color: Yellow-brown

Odor: Characteristic, hot, spicy

Flash Point: > 61°C Abel–Pensky

Density @ 20°C: <1 g/cm³ pycnometer

Solubility in Water: Insoluble

Solubility in Other Solvents: Good solubility in fat phases

Solvent Content: No solvent residues

Content of Water: 5–8%
10. STABILITY AND REACTIVITY

Stability: Stable
Conditions to Avoid: Heat, open flame and sunlight
Materials to Avoid: Oxidizing agents
Hazardous Decomposition or Byproducts: None when carefully used
Hazardous Polymerization: Will Not Occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity: LD50: Piperine: Oral 514 mg/kg Rat
Corrosive and Irritant Effects: Piperin: RTECS No: TN2321500
Additional Information on Tests: Irritating to eyes, respiratory system and skin
May cause sensitization by skin contact
Frequent or prolonged contact with skin may cause dermal irritation.

Further Information: Acute toxicity, irritation of the skin and mucous membrane, and mutagenic potential of the preparation assessed by the manufacturer on the basis of the data sheets available on the main components. Information gaps exist on some of the main individual components. However, according to the experience of the manufacturer, no dangers above and beyond those on the product label are to be expected.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data for ecological evaluation on hand. Under appropriate use there are no ecological problems to expect. No heavy metals and inorganic components.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods: Do not put into sewer lines. Dispose of according to local, state and federal regulations.

14. TRANSPORT INFORMATION

DOT Classification: Not a DOT controlled material (USA).
Class/Division: Not restricted
Proper Shipping Name: NA
Label: None
Packing Group: NA
ID Number: NA

15. REGULATORY INFORMATION

Labeling According to EC-Guidelines: Danger Symbols: Xn– Harmful
Hazardous Components to be Indicated on Label: Piperine

R Phrases: 22: Harmful if Swallowed
36/37/38: Irritating to eyes, respiratory system and skin
43: May cause sensitization by skin contact
S Phrases:
24: Avoid contact with skin
28: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
37: Wear suitable gloves

Special Labeling for Certain Preparations:
Warning – this preparation contains a substance not yet tested completely

National Regulatory Information:
Employment Restrictions:
Observe employment restrictions for young people. Observe employment restrictions for child bearing and nursing mothers.

Water Contaminating Class:
1– slightly water contaminating

16. ADDITIONAL INFORMATION
This information is provided for documentation purposes only.

The complete range of conditions or methods of use are beyond our control therefore we do not assume any responsibility and expressly disclaim any liability for any use of this product. Information contained herein is believed to be true and accurate however, all statements or suggestions are made without warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof. Compliance with all applicable federal, state, and local laws and local regulations remains the responsibility of the user.

This safety sheet cannot cover all possible situations which the user may experience during processing. Each aspect of your operation should be examined to determine if, or where, additional precautions may be necessary. All health and safety information contained in this bulletin should be provided to your employees or customers.