# Specification Sheet

## Sesamin Seed Extract (Sesamin 90%)

<table>
<thead>
<tr>
<th>Item No.</th>
<th>SS007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country of Origin</td>
<td>China</td>
</tr>
<tr>
<td>Botanic Name:</td>
<td><em>Sesamum indicum</em> L.</td>
</tr>
<tr>
<td>Plant Parts:</td>
<td>Seeds</td>
</tr>
<tr>
<td>Extraction Solvent:</td>
<td>Ethanol and Water</td>
</tr>
<tr>
<td>Sterilization:</td>
<td>Non-Irradiated/Non-ETO/Treat by Heat Only</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test</th>
<th>Specification</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identification</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sesamin</td>
<td>≥ 90.0%</td>
<td>HPLC</td>
</tr>
<tr>
<td><strong>Physical/Chemical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identification</td>
<td>Positive</td>
<td>TLC</td>
</tr>
<tr>
<td>Appearance</td>
<td>White crystalline powder</td>
<td>Visual</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
<td>Organoleptic</td>
</tr>
<tr>
<td>Powder Size (USP)</td>
<td>≥ 95% through 40 mesh</td>
<td>USP #40 Sieve</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>0.30 – 0.60 g/mL</td>
<td>USP41-NF36&lt;616&gt;</td>
</tr>
<tr>
<td>Tapped Density</td>
<td>0.60 – 0.80 g/mL</td>
<td>USP41-NF36&lt;616&gt;</td>
</tr>
<tr>
<td>Loss on Drying</td>
<td>≤ 5.0%</td>
<td>USP41-NF36&lt;731&gt;</td>
</tr>
<tr>
<td>Residue on Ignition</td>
<td>≤ 0.5%</td>
<td>USP41-NF36&lt;281&gt;</td>
</tr>
<tr>
<td>Residual Solvents</td>
<td>USP&lt;467&gt;</td>
<td>USP41-NF36&lt;467&gt;</td>
</tr>
<tr>
<td>Pesticide Residues</td>
<td>USP&lt;561&gt;</td>
<td>USP41-NF36&lt;561&gt;</td>
</tr>
<tr>
<td>Aflatoxins</td>
<td>≤ 20 ppb</td>
<td>USP41-NF36&lt;561&gt;</td>
</tr>
<tr>
<td><strong>Heavy Metals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Heavy Metals</td>
<td>≤ 10 µg/g</td>
<td>USP41-NF36&lt;231&gt;</td>
</tr>
<tr>
<td>Arsenic (As)</td>
<td>≤ 1.0 µg/g</td>
<td>ICP-MS</td>
</tr>
<tr>
<td>Cadmium (Cd)</td>
<td>≤ 0.5 µg/g</td>
<td>ICP-MS</td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>≤ 1.0 µg/g</td>
<td>ICP-MS</td>
</tr>
<tr>
<td>Mercury (Hg)</td>
<td>≤ 0.5 µg/g</td>
<td>ICP-MS</td>
</tr>
<tr>
<td><strong>Microbiology</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Plate Count</td>
<td>≤ 1,000 cfu/g</td>
<td>USP41-NF36&lt;2021&gt;</td>
</tr>
<tr>
<td>Molds and Yeasts</td>
<td>≤ 100 cfu/g</td>
<td>USP41-NF36&lt;2021&gt;</td>
</tr>
<tr>
<td>Total Coliforms</td>
<td>&lt; 10 cfu/g</td>
<td>USP41-NF36&lt;2021&gt;</td>
</tr>
<tr>
<td><em>Salmonella</em></td>
<td>Absence</td>
<td>USP41-NF36&lt;2022&gt;</td>
</tr>
<tr>
<td><em>E. Coli</em></td>
<td>Absence</td>
<td>USP41-NF36&lt;2022&gt;</td>
</tr>
<tr>
<td><em>Staphylococcus aureus</em></td>
<td>Absence</td>
<td>USP41-NF36&lt;2022&gt;</td>
</tr>
</tbody>
</table>

Quality Approved By: [Signature]

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