Lecithin Direct Compression

Summary

Lecithin, derived from the Greek word for "egg yolk," is actually an umbrella term referring to a variety of naturally occurring fatty compounds made of phospholipids, glycoyls, and/or triglycerides. Some form of lecithin is found in every cell of the body, and is essential to numerous functions including neurotransmission and maintenance of healthy cell membranes. Lecithin is also used as a commercial food additive (as a natural emulsifier or lubricant) and sold as a dietary supplement to reduce blood cholesterol, improve liver function, and ameliorate acne.

Formulation

<table>
<thead>
<tr>
<th></th>
<th>Active content [mg]</th>
<th>mg/tablet</th>
<th>Contribution [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecithin</td>
<td>220.0</td>
<td>220.0</td>
<td>27.5</td>
</tr>
<tr>
<td>EMDEX® (Dextrates)</td>
<td>580.0</td>
<td>580.0</td>
<td>72.5</td>
</tr>
<tr>
<td>Total</td>
<td>800.0</td>
<td>800.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Procedure

Blending:
The lecithin and EMDEX® were blended for 20 minutes. The mixture was ready for direct compression.

Equipment:
- Tablet Press: Korsch EK 0 eccentric press
- Turbula Mixer: Type T2A
- Hardness Tester: Pharmatest PTB 311

Tablet Characteristics

- Tablet Weight: 800 mg
- Tablet Height: 5 mm
- Tablet Diameter: 13 mm
- Compaction Force: 5 kN
- Crushing Strength: 80 N

No lubricant was needed, as lecithin is a natural lubricant.

Disclaimer: The information provided is based on thorough research and is believed to be completely reliable. Application suggestions are given to assist our customers, but are for guidance only. Circumstances in which our material is used vary and are beyond our control. Therefore, we cannot assume any responsibility for risks or liabilities, which may result from the use of this technical advice.