**Task:**

**Application field:** Analytic

**Material:** PET Preforms

**Feed size:** 10 mm

**Feed quantity:** 50 g

**Material specification(s):** dry, elastic, temperature sensitive

**Customer requirements(s):** 300 µm

**Subsequent analysis:** GC - Gas Chromatography

**Solution**

**Selected Instrument(s):** Cutting Mill SM 300

**Configuration(s)**

<table>
<thead>
<tr>
<th>Item nos.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SM 300, 200 V, 50/60 Hz, cutting bars stainless steel</td>
</tr>
<tr>
<td>1</td>
<td>Universal hopper with plastic plunger, for SM 200 / SM 300</td>
</tr>
<tr>
<td>1</td>
<td>6-disc rotor, stainless steel, with reversible cutting tips of tungsten carbide</td>
</tr>
<tr>
<td>1</td>
<td>Bottom sieve, square holes, 20 mm, stainless steel</td>
</tr>
<tr>
<td>1</td>
<td>V-rotor for SM 300 stainless steel</td>
</tr>
<tr>
<td>1</td>
<td>Bottom sieve, trapezoid holes, 0.5 mm, stainless steel</td>
</tr>
<tr>
<td>1</td>
<td>Cyclone unit incl. 1 sample bottle 500 ml (to be used with industrial vacuum cleaner)</td>
</tr>
<tr>
<td>1</td>
<td>Collecting receptacle 5 l with adapterlid stainless steel</td>
</tr>
<tr>
<td>1</td>
<td>Industrial vacuum cleaner HDS 2000, 230 V, 50/60 Hz</td>
</tr>
</tbody>
</table>

Please note: Other electrical versions of the instrument(s) are available with different item numbers.

**Parameter(s):** Revolution speed 3000 rpm

**Time:** 1 min

**Achieved result(s):** 85% < 750 µm

**Remark(s):**

The application report is based solely on the processing of the available sample material in the indicated amount. No legal claims shall be derived from this test report. Subject to technical modification and errors.

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Recommendation:
The Cutting Mill SM 300 is suitable to grind the sample material under the above mentioned conditions.
Pictures of the sample:

Picture 1: Original sample
Picture 2: Sample after pre cutting with 6-disc rotor and bottom sieve 20 mm
Picture 3: Sample after fine grinding with V-rotor and bottom sieve 0.5 mm

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