Supporting clean energy product development. First laboratory-scale FILMIX™ for continuous operation.

Features
- Ability to control particle characteristics (sharp particle size distributions, particle size reduction to the nanoscale).
- Dispersion capacity of up to 180 mL/min (10.8 L/h). May also be operated in batch mode.
- Made for easy disassembly, reassembly and cleaning.
- Touch panel operation and monitoring.
- The rotor speed, run time, liquid temperature, load current, and power consumption values are displayed.
- USB Data-logging capability (logs impeller speed, run time, vessel temperature, load amperage, power consumption).
- Utility Requirements: Cooling water temperature of 5 – 10°C (Cooling capacity of 3.7 kW at 20°C recommended). Dry air supply pressure >0.4 MPaG, 25 NL/min.
**FILMIX™ 56-L.**
High-speed thin film mixer.

**Applications**

**Batteries:** Lithium-ion batteries, fuel-cells, capacitors

**Cosmetics:** Sunscreen, lotion, moisturizer, creams

**Technical information:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>AC 200 V ± 10 %, 50/60 Hz, 3 phase, 9 kVA</td>
</tr>
<tr>
<td>Mixing head</td>
<td>Motor: 3.7 kW, up to 11,000 rpm</td>
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<tr>
<td>Control panel</td>
<td>Touch panel</td>
</tr>
<tr>
<td>Volume range</td>
<td>180 mL/min* (continuous), 50 – 90 ml (batch)</td>
</tr>
<tr>
<td>Dimensions</td>
<td>W 340 x D 560 x H 640 mm</td>
</tr>
<tr>
<td>Approx. Weight</td>
<td>45 kg</td>
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</tbody>
</table>

**Electrode slurry preparation**

**Pre-mixing**
Recommended equipment:
Homoogenizing disper

**FILMIX™ dispersion**

- Materials (5L)
- Hopper
- Constant flow pump
  - flow rate: 180 mL/min *
- FILMIX™ Model 56-L
- Cooling water
  - (5 – 10°C)
- Buffer Tank
- Dry air
  - (0.4 MPa)
- Cooling water
  - (20 – 25°C)
- Vacuum pump

**Deaeration**
Recommended equipment:
Anchor mixer

* Dispersion capacity is calculated with a residence time of 30 seconds.