Soaresin™ RG100

Additive for PP/EVOH Regrind

Application

Soaresin™ RG100 is an additive specifically designed for processing PP/EVOH regrind. This resin is very useful for preventing the formation of gels and fish eyes.

General Properties

<table>
<thead>
<tr>
<th>Properties</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>MFR(^1) (190 degree C, 2160g)</td>
<td>g/10min</td>
<td>2.5</td>
</tr>
<tr>
<td>Volatile Matter</td>
<td>%</td>
<td>&lt; 0.3</td>
</tr>
<tr>
<td>Melting Point(^2)</td>
<td>degree C</td>
<td>111</td>
</tr>
<tr>
<td>Density(^3) (23 degree C)</td>
<td>g/cm(^3)</td>
<td>0.98</td>
</tr>
</tbody>
</table>

1): Measured with Melt Indexer
2): Measured with DSC, both heating and cooling speeds of 10 degree C/min
3): Measured with Micromeritics Gas Pycnometer

*The above figures are representative values and are not guaranteed.

How to use

Blending RG100 into regrind layer by 2 - 5wt% (dry blend with scrap materials).
**Soaresin™ Technical Data Sheet**

*Revised date on 26 Mar. 2018*

**Melt Viscosity**

![Melt Viscosity Graph](image)

*Fig. 1  Melt Viscosity of Soaresin™ RG100*

**Effect of Soaresin™ RG100**

**Condition of regrind test**

- Extruder: 40 mmφ Single screw extruder (L/D=28)
- Screw: Full flight
- Screen pack: 90mesh x 2
- Screw rotation: 40 rpm
- Re-extruded times: 10 times
- Resin composition: TiO₂+PP/ADH/ET3803/RG100 = 90/5/5/3(wt%)
Results of regrind test

<table>
<thead>
<tr>
<th>Additive</th>
<th>Build-up</th>
<th>Film appearance*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Die</td>
<td>screw</td>
</tr>
<tr>
<td>RG100</td>
<td>slight</td>
<td>none</td>
</tr>
<tr>
<td>None</td>
<td>many</td>
<td>a little</td>
</tr>
</tbody>
</table>

*: evaluate by mono-layer film

Buildup at die-lip

1 pass

No Additive

with RG100

5 pass

-> RG100 leads much less buildup.
Quality and Safety for Application of Soaresin™ RG100

High quality Soaresin™ is produced by Mizushima plant in Japan, NOLTEX L.L.C. in U.S.A. and NIPPON GOHSEI UK Ltd. in U.K.. All plants are certified to meet the requirement of ISO 9001.

Soaresin™ contains no heavy metals or other harmful substances. Soaresin™ meets the Food Sanitation Standards of various countries. Please contact us to inquire about food product hygiene for the various Soaresin™ brands or for food hygiene conformity in other countries.

U.S.A : Federal Food, Drug and Cosmetic Act
JAPAN : Ministry of Health and Welfare Announcement No.370(1959) and Its Latest Amendment No.18(1994)
Voluntary Standards for Food Contact Substances and Polymers (JHOSPA)
CHINA : GB9685, GB4806.6 and their amendments

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