



# Soaresin<sup>™</sup> RG100

# Additive for PP/EVOH Regrind

## **Application**

Soaresin<sup>™</sup> 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**

Properties	Unit	Value
MFR <sup>1)</sup> (190 degree C, 2160g)	g/10min	2.5
Volatile Matter	%	< 0.3
Melting Point <sup>2)</sup>	degree C	111
Density <sup>3)</sup> (23 degree C)	g/cm <sup>3</sup>	0.98

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).







# Melt Viscosity

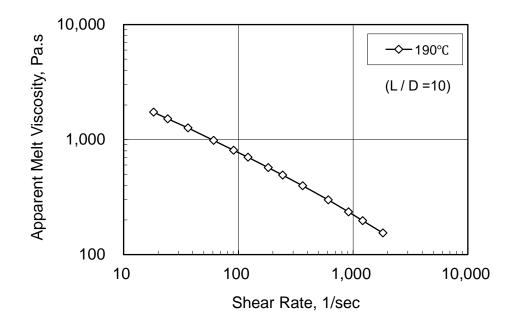


Fig. 1 Melt Viscosity of Soaresin™ RG100

# Effect of Soaresin<sup>™</sup> RG100

#### Condition of regrind test

40 mmφ Single screw extruder(L/D=28)
Full flight
90mesh x 2
C1/C2/C3/C4/D = 200/220/230/230/220 degree C
40 rpm
10 times
TiO <sub>2</sub> +PP/ADH/ET3803/RG100 = 90/5/5/3(wt%)







#### Results of regrind test

	Build-up		Film appearance*		
Additive	Die	screw	fish-eyes	surface	Color
RG100	slight	none	slight	flat	uniform
None	many	a little	a little	rough	uneven

\*: evaluate by mono-layer film

#### Buildup at die-lip

No Additive

1 pass



5 pass



10 pass



with RG100







-> RG100 leads much less buildup.







## Quality and Safety for Application of Soaresin<sup>™</sup> RG100

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

- U.S.A: Federal Food, Drug and Cosmetic Act
- EU: Commission Regulation (EU)No. 10/2011 and its amendments
- 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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