ReZilok Rx®102

Datasheet and Process Guide

Description

ReZilok Rx®102 tie-layer resin is a functionalized POE based tie-layer. This tie-layer resin is used to bond dissimilar materials in coextrusion or reflow processes. ReZilok Rx®102 is optimized for adhesion to a variety of materials through chemical and physical bonding mechanisms.

Form	Pellets
Appearance	Translucent
Applications	Multilayer film and tubing
Processing Method	Extrusion

Typical Properties

Property	Value	Unit	Test Method
Density	0.89	g/cm^3	Pycnometer
Melt Flow Rate (190°C / 2.16kg)	2.5	g/10 min	ASTM D1238
Hardness	87	Shore A	ASTM D2240
Ultimate Tensile Strength	1500	psi	ASTM D638
Ultimate Tensile Elongation	1000	%	ASTM D638
Flexural Modulus	6.3	kpsi	ASTM D790
Flexural Stress at 5% Deflection	330	psi	ASTM D790

Notes:
Test parts injection molded
Test parts conditioned at 23°C / 50% RH for 24hr
Tensile test speed 500mm/min
Flexural test speed 1%/min

Drying Requirements

In order to ensure maximum adhesion performance and extrusion surface quality, it is recommended to dry ReZilok Rx®102 at 160°F until moisture content is below 0.05%. In thin walled applications, drying ReZilok Rx®102 removes any potential pellet surface moisture which could influence final product surface aesthetics.

Recommended Process Temperatures

Zone	Temperature (°F)
Feed Zone	300 - 330
Transition Zone	400 - 440
Metering Zone	400 - 440
Adaptor	400 - 440
Die	400 - 440

Additional Process Considerations

A variety of factors can influence the adhesion performance of ReZilok Rx®102 tie-layer resin. Adhesion is generally improved by increasing the melt temperature, the duration of interlayer contact in the melt state, and the interlayer contact pressure.

Purging

An LDPE resin is recommended for purging prior to or after extrusion of ReZilok Rx®102. To prevent gel or char formation, it is recommended to maintain a slow throughput while the line is sitting idle with ReZilok Rx®102 in the barrel.

Handling

ReZilok Rx®102 is supplied as free-flowing pellets. In general, ReZilok Rx®102 can be handled similar to standard polyethylene polymers. A Safety Data Sheet for ReZilok Rx®102 should be consulted for other detailed guidelines.

Storage

Typical shelf life of ReZilok Rx®102 is two years from date of delivery in unopened packaging. When not being used, the container and liner should be closed and stored in a cool dry area protected from UV light.

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See Safety Data Sheet for Health & Safety Consideration