



Technical Data Sheet

REVOLOOP™ 70-LD NA Recycled Plastics Resin

Overview

REVOLOOP™ 70-LD NA Recycled Plastics Resin recycled plastics resin is a PCR-rich LDPE resin for film applications that require improved homogeneity and consistency over other film-based PCR resin offerings.

REVOLOOP™ 70-LD NA Recycled Plastics Resin recycled plastics resin is designed with 70% recycled content for use in shrink film and other secondary and tertiary film applications.¹

Sustainability Attribute:



Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.930	g/cm ³	0.930	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	0.35	g/10 min	0.35	g/10 min	ISO 1133
Films					
Film Thickness - Tested	2.3	mil	58	µm	
Film Puncture Resistance (2.3 mil (58 µm))	29.5	ft·lb/in ³	2.44	J/cm ³	
Film Toughness					ASTM D882
MD : 2.3 mil (58 µm)	314	ft·lb/in ³	26.0	J/cm ³	
TD : 2.3 mil (58 µm)	800	ft·lb/in ³	66.2	J/cm ³	
Tensile Strength					ASTM D882
MD : Yield, 2.3 mil (58 µm)	1540	psi	10.6	MPa	
TD : Yield, 2.3 mil (58 µm)	1520	psi	10.5	MPa	
MD : Break, 2.3 mil (58 µm)	2610	psi	18.0	MPa	
TD : Break, 2.3 mil (58 µm)	2700	psi	18.6	MPa	
Tensile Elongation					ASTM D882
MD : Break, 2.3 mil (58 µm)	150	%	150	%	
TD : Break, 2.3 mil (58 µm)	580	%	580	%	
Dart Drop Impact (2.3 mil (58 µm))	130	g	130	g	ASTM D1709

1. ASTM: American Society for Testing and Materials
ISO: International Standardization Organization

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.



Physical Properties (Cont.)

Films	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method
Elmendorf Tear Strength					ASTM D1922
MD : 2.3 mil (58 µm)	110	g	110	g	
TD : 2.3 mil (58 µm)	610	g	610	g	
Thermal					
Vicat Softening Temperature	211	°F	99.5	°C	ASTM D1525
Melting Temperature	250	°F	121	°C	DSC
Optical					
Gloss (45°, 2.28 mil / 58.0 µm))	28		28		ASTM D2457
Haze (2.28 mil / 58.0 µm))	36.0	%	36.0	%	ASTM D1003

Legal Statement

¹This product is not approved for preparation of packaging components that will be in direct contact with food, beverages, animal feed, seeds for producing food or animal feed, or other materials that will be utilized to manufacture primary packaging components for these applications. Dow reserves the right to review applications utilizing post-consumer recyclable (PCR) materials. Customers are requested to complete a PCR Application Screen Form prior to sampling or sales. Please contact Dow representative for details.

Extrusion Notes

Fabrication Conditions for Blown Film:

- Screw Size: 2.5 in. (63.5 mm); 30:1 LID
- Screw Type: Maddoc Barrier Screw
- Die Gap: 40 mil (1.02 mm)
- Melt Temperature: 420°F (215°C)
- Output: 8 lb/hr/in. of die circumference
- Die Diameter: 8 in.
- Blow-Up Ratio: 2.5:1

