



Technical Data Sheet

DOW™ LDPE SC 7642 REN Low Density Polyethylene Resin

Overview

DOW™ LDPE SC 7642 REN Low Density Polyethylene Resin is designed for high-speed cast extrusion lines, where it provides excellent draw down, low neck-in and high melt stability with a good balance between stiffness and tear resistance. Due to its density, the coefficient of friction of films made with DOW™ LDPE SC 7642 REN Polyethylene Resin will be lower. In association with DOWLEX™ resins, it gives films with a superior balance between machine and cross direction properties. This resin can be readily extruded using conventional cast film techniques, using melt temperatures between 200 and 270°C.

Sustainability Attribute:



Complies with:

- EU No 10/2011
- U.S. FDA 21 CFR 177.1520(c) 2.2
- U.S. FDA-DMF
- ISCC PLUS certification for bio-circular plastics

Consult the regulations for complete details.

Physical Properties

Physical	Nominal Value	Unit (English)	Nominal Value	Unit (SI)	Test Method ¹
Density	0.928	g/cm ³	0.928	g/cm ³	ASTM D792
Melt Index (190°C/2.16 kg)	2.0	g/10 min	2.0	g/10 min	ISO 1133
Mechanical					
Coefficient of Friction					ASTM D1894
vs. Itself – Dynamic	0.45		0.45		
vs. Metal – Dynamic	0.45		0.45		
Films					
Film Thickness — Tested	1.5	mil	38	µm	

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
Tensile Strength					ASTM D882
MD: Yield	725	psi	5.00	MPa	
TD: Yield	653	psi	4.50	MPa	
MD: Break	1450	psi	10.0	MPa	
TD: Break	1020	psi	7.00	MPa	
Tensile Elongation					ASTM D882
MD: Break	280	%	280	%	
TD: Break	280	%	280	%	
Elmendorf Tear Strength					ASTM D1922
MD	130	g	130	g	
TD	160	g	160	g	

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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Harmful Applications Policy

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