

DOWLEX[™] SC 2111G Polyethylene Resin

Overview

DOWLEX™ SC 2111G Polyethylene Resin is specifically designed for large/high output cast film lines to make high performance industrial stretch films.

Films made from DOWLEX SC 2111G Polyethylene Resin exhibit an excellent balance of processability, mechanical and stretchability performance properties.

DOWLEX SC 2111G Polyethylene Resin is to be used as a core resin in coextruded cast film structures together with a cling resin for films in the thickness range between 10 and 35 microns.

DOWLEX SC 2111G Polyethylene Resin should comply with FDA regulation 21 CFR 177.1520 and with most European food contact regulations when used unmodified and processed according to good manufacturing practices for food contact applications. Please contact your nearest Dow office regarding food contact compliance statements. The purchaser remains responsible for determining whether the use complies with all relevant regulations.

Applications:

· Cast Stretch Film for pallets

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	0.920 g/cm ³	0.920 g/cm ³	ASTM D792
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	3.7 g/10 min	3.7 g/10 min	ISO 1133
Films	Nominal Value (English)	Nominal Value (SI)	Test Method
Film Thickness - Tested	0.906 mil	23.0 µm	
Film Puncture Force (0.906 mil (23.0 µm))	6.97 lbf	31.0 N	Dow Method ¹
Tensile Stress			ISO 527-3 ¹
MD: Yield, 0.906 mil (23.0 µm)	841 psi	5.80 MPa	
TD: Yield, 0.906 mil (23.0 µm)	870 psi	6.00 MPa	
MD: Break, 0.906 mil (23.0 μm)	4930 psi	34.0 MPa	
TD: Break, 0.906 mil (23.0 µm)	3630 psi	25.0 MPa	
Tensile Elongation			ISO 527-3 ¹
MD: Break, 0.906 mil (23.0 µm)	430 %	430 %	
TD: Break, 0.906 mil (23.0 µm)	690 %	690 %	
Dart Drop Impact (0.906 mil (23.0 µm))	110 g	110 g	ISO 7765-1/A ¹
Elmendorf Tear Strength			ASTM D1922 1
MD: 0.906 mil (23.0 µm)	170 g	170 g	
TD: 0.906 mil (23.0 µm)	550 g	550 g	
Film Stretch Performace - Max Elongation	350 %	350 %	Dow Method
Film Stretch Performace - Max Stretch Force			Dow Method
	36000 g	36000 g	
Optical	Nominal Value (English)	Nominal Value (SI)	Test Method
Gloss (45°, 0.906 mil (23.0 μm))	93	93	ASTM D2457 1
Haze (0.906 mil (23.0 μm))	0.60 %	0.60 %	ISO 14782 ¹
Extrusion	Nominal Value (English)	Nominal Value (SI)	
Melt Temperature	482 °F	250 °C	

Fabrication Conditions For Cast Films:

- Chill Roll Temperature: 25°C
- Melt Temperature: 250°C
- Recommended Guage Range: 10 to 35 μm

Notes

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

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¹ Cast film fabricated at 250 m/min.

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