

# DINALEN® 50

Low Density Polyethylene

DIOKI d.d.

## Message:

DINALEN 50 is low density polyethylene containing no additives. It is primarily intended for blow and cast film extrusion while other processing techniques can be used to a lesser extent.

DINALEN 50 exhibits very good draw-down with good balance of stiffness, mechanical and optical properties of extruded film.

DINALEN 50 is extruded at recommended melt temperature range between 160°C and 180° C. Recommended film thickness: 0.025 to 0.060 mm.

Application

Thin non-slippery film of high gloss and transparency

Heat shrinkable film with excellent stiffness for industrial bundling

Extruded foams with physical blowing agent

Small diameter pipe extrusion

Wire and cable sheathing

Injection moulded thick-walled products

Blown packaging and other shallow objects

Mixing and co-extrusion with suitable polyolefin grades

General Information	
Features	Good Drawdown
	Good Heat Shrinkability
	Good Stiffness
	High Clarity
	High Gloss
	Opticals
Uses	Blending
	Cast Film
	Film
	Foam
	Packaging
	Piping
Agency Ratings	Shrink Wrap
	EC 1907/2006 (REACH)
	EU 2002/72/EC
	EU 2004/1/EC
	EU 2004/19/EC
	EU 2005/79/EC
RoHS Compliance	EU 2007/19/EC
	EU 2008/39/EC
	EU 94/62/EC
	RoHS Compliant

Appearance	Clear/Transparent
Forms	Pellets
Processing Method	Blown Film Cast Film Coextrusion Foam Extrusion Injection Molding Pipe Extrusion Wire & Cable Extrusion

Physical	Nominal Value	Unit	Test Method
Density	0.923	g/cm <sup>3</sup>	ISO 1183
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)	2.0	g/10 min	ISO 1133
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	45		ISO 868
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (Compression Molded)	200	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Yield, Compression Molded	11.0	MPa	
Break, Compression Molded	15.0	MPa	
Tensile Strain (Break, Compression Molded)	620	%	ISO 527-2
Coefficient of Friction			ISO 8295
vs. Itself - Dynamic	> 0.40		
vs. Itself - Static	> 0.40		
Films	Nominal Value	Unit	Test Method
Film Thickness - Tested	50	µm	
Film Thickness - Recommended / Available	0.025mm to 0.060 mm		
Tensile Strength			ISO 527-3
MD : 50 µm	20.0	MPa	
TD : 50 µm	17.0	MPa	
Tensile Elongation			ISO 527-3
MD : Break, 50 µm	220	%	
TD : Break, 50 µm	330	%	
Dart Drop Impact <sup>1</sup> (50 µm)	220	g	ISO 7765-1
Trouser Tear Resistance			ISO 6383-1
MD : 50 µm	90.0	N/mm	
TD : 50 µm	80.0	N/mm	
Thermal	Nominal Value	Unit	Test Method
Vicat Softening Temperature	94.0	°C	ISO 306/A50
Melting Temperature	113	°C	ISO 11357-3
Optical	Nominal Value		Test Method

Gloss		ASTM D2457
20°, 50.0 µm	> 60	
60°, 50.0 µm	> 110	
Extrusion	Nominal Value	Unit
Melt Temperature	160 to 180	°C
NOTE		
1.	Profile 2	

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#### Recommended distributors for this material

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