

Producer: DSM / The Netherlands

STAMYLAN LD 2102TX00

Description:

Low density polyethylene for blown film.

DSM produces low density polyethylene by the tubular and the autoclave reactor processes. As a result the product range covers a wide variety of densities and melt flow rates. Further it includes a large number of grades with excellent optical properties which yield film with a high to very high clarity.

Finally there is a wide variety of additives. For example, several grades contain the slip agent erucamide. Films produced from these materials have excellent surface properties and very low odour and taste levels, which is of advantage in e.g. food packaging.

PROPERTIES	UNIT	VALUE	TEST METHOD
<u>Polymer properties</u>			
Melt Flow Rate (MFR)(2160 g, 190°C)	dg/min	1.9	ISO 1133
Density, 23°C	kg/m ³	921	ISO 1183 (A)
<u>Formulation level</u>			
Slip ¹	ppm	-	DSM method
Anti block	ppm	-	DSM method
Anti oxidant		-	
Processing aid (PPA)		-	
<u>Optical properties</u>			
Gloss (45 ⁰)	°/00	50	ASTM D 2457
Haze	%	11	ASTM D 1003A
Clarity	mV	29	DSM method
<u>Mechanical properties</u>			
Impact strength	kJ/m	26	ASTM D 4272
Tear strength TD	kN/m	25	ISO 6383-2
Tear strength MD	kN/m	60	ISO 6383-2
Tensile test			ISO R527-1
Yield Stress TD	MPa	11	
Yield Stress MD	MPa	13	
Tensile Stress at break TD	MPa	20	
Strain at break TD	%	> 500	
Strain at break MD	%	> 150	
Modulus of elasticity TD	MPa	200	
Modulus of elasticity MD	MPa	190	
Coefficient of friction		> 1.0	ASTM D 1894
Blocking	g	20	DSM method
Re-blocking	g	100	DSM method