



LALEH Petrochemical Co.

LDPE L2102TN42

Low Density Poly Ethylene

Typical Data

Properties	Value	Unit	Test Method
Polymer Properties			
Melt Flow Rate	1.9	dg/min	ISO 1133
Density	921	kg/m ³	ISO 1183 (A)
Optical Properties			
Gloss (45°)	53	%	ASTM D 2457
Haze	11	%	ASTM D 1003A
Clarity	28	mV	DSM method
Formulation Level			
Slip	500 E	ppm	DSM method
Anti block	2300	ppm	DSM method
Anti oxidant	-		
Processing aid (PPA)	-		
Mechanical Properties			
Impact strength	18	kJ/m	ASTM D 4272
Tear strength TD	22	kN/m	ISO 6383-2
Tear strength MD	72	kN/m	ISO 6383-2
Tensile test			ISO R527-1
Yield stress TD	11	MPa	
Yield Stress MD	12	MPa	
Tensile Stress at break TD	18	MPa	
Tensile Stress at break MD	32	MPa	
Strain at break TD	>500	%	
Strain at break MD	>100	%	
Modulus of elasticity TD	200	MPa	
Modulus of elasticity MD	200	MPa	
Coefficient of friction	0.1		ASTM D 1894
Blocking	< 5	g	DSM method
Re-Blocking	30	g	DSM method

General Information

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 firm 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.