NAME: LDPE 2100TN00

Product Description:

LDPE 2100TN00 is a grade with excellent toughness and outstanding biaxial shrink properties.
The material contains no additives, has a very low energy consumption during processing and has excellent draw down ability.

Application:

LDPE 2100TN00 is a heavy duty film grade suitable for applications like shrink hoods, industrial sacks, carrier bags and liners.
Film properties have been measured at 50 µm films with a BUR of 3.
Films have been produced on Kiefel IBC film blown line at 200 kg/h. Die size 200 mm, die gap of 0.8 mm.

Typical data: (Table)

Properties	Units SI	Values	Test methods
Melt flow rate (MFR)			ISO 1133
at 190 °C and 2.16 kg	g/10 min	0.3	
Density	kg/m^3	921	ISO 1183 (A)
Gloss (45°)	0/ /oo	45	ASTM D 2457
Haze	%	12	ASTM D 1003A
Clarity	mV	50	SABIC method
Impact strength	kJ/m	30	ASTM D 4272
Tear strength TD	kN/m	30	ISO 6383-2
Tear strength MD	kN/m	30	ISO 6383-2
Tensile test film			ISO 527-3
Yield stress TD	MPa	11	
Yield stress MD	MPa	11	
Stress at break TD	MPa	23	
Stress at break MD	MPa	28	
Strain at break TD	%	> 500	
Strain at break MD	%	> 200	
Modulus of elasticity TD	MPa	190	
Modulus of elasticity MD	MPa	190	
Coefficient of friction	-	1.0	ASTM D 1894
Blocking	gr	20	SABIC method
Re-blocking	gr	10	SABIC method
Vicat softening temperature			ISO 306
at 10 N (VST/A)	°C	93	

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. The LDPE grade slate has a wide variety of slip and anti-block additive levels and includes a large numbers of grades with excellent optical properties.
Storage and handling. Polyethylene’s resins (in palletized or powder form) should be stored in such a way that it prevents exposure to direct sunlight and/or heat, as this may lead to quality deterioration. The storage location should also be dry, dust free and the ambient temperature should not exceed 50 °C. Not complying with these

precautionary measures can lead to a degradation of the product which can result in color changes, bad smell and inadequate product performance. It is also advisable to process polyethylene resins (in palletized or powder form) within 6 months after delivery, this because also excessive aging of polyethylene can lead to a deterioration in quality.
Environment and recycling. The environmental aspects of any packaging material do not only imply waste issues but have to be considered in relation with the use of natural resources, the preservations of foodstuffs, etc. SABIC Europe considers polyethylene to be an environmentally efficient packaging material. Its low specific energy consumption and insignificant emissions to air and water designate polyethylene as the ecological alternative in comparison with the traditional packaging materials. Recycling of packaging materials is supported by SABIC Europe whenever ecological and social benefits are achieved and where a social infrastructure for selective collecting and sorting of packaging is fostered. Whenever 'thermal' recycling of packaging (i.e. incineration with energy recovery) is carried out, polyethylene -with its fairly simple molecular structure and low amount of additives- is considered to be a trouble-free fuel.