# SABIC® LDPE 2100TN21

### Low Density Polyethylene

## Saudi Basic Industries Corporation (SABIC)

#### Message:

SABIC® LDPE 2100TN21 is a grade with excellent toughness and tear strength and outstanding shrink properties. The material contains anti block and slip erucamide, has a very low energy consumption during processing and has good draw down properties.

SABIC® LDPE 2100TN21 is suitable for application in shrinkhoods, industrial sacks, heavy duty carrier bags and liners.

The product mentioned herein is in particular not tested and therefore not validated for use in pharmaceutical/medical applications.

General Information					
Additive	Erucamide Lubricating Additive (300 ppm)				
	Anti-caking agent (650 ppm)				
Features	smoothness				
	Anti-caking property				
	Good stripping				
	Good tear strength				
	Good toughness				
Uses	Films				
	Lining				
	Heavy packing bag				
Forms	Particle				
Processing Method	Blow film				
Physical	Nominal Value	Unit	Test Method		
Density	0.921	g/cm³	ISO 1183/A		
Melt Mass-Flow Rate (MFR) (190°C/2.16					
kg)	0.33	g/10 min	ISO 1133		
Mechanical	Nominal Value	Unit	Test Method		
Coefficient of Friction (Blown Film)	0.20		ASTM D1894		
Films	Nominal Value	Unit	Test Method		
Film Thickness - Tested	50	μm			
Tensile Modulus			ISO 527-3		
MD: 50 µm, blown film	190	MPa	ISO 527-3		
TD: 50 µm, blown film	190	MPa	ISO 527-3		
Tensile Stress			ISO 527-3		
MD: Yield, 50 µm, blown film	12.0	MPa	ISO 527-3		
TD: Yield, 50 µm, blown film	11.0	MPa	ISO 527-3		
MD: 50 µm, blown film	27.0	MPa	ISO 527-3		

MD: Broken, 50 µm, blown film         > 200         %         ISO 527-3           TD: Broken, 50 µm, blown film         > 500         %         ISO 527-3           Impact         Nominal Value         Unit         Test Method           Impact Strength (50.0 µm) <sup>1</sup> 300         J/cm         ASTM D4272           Blocking (50.0 µm) <sup>2</sup> 10         g         Internal method           Re-blocking (50.0 µm) <sup>3</sup> 10         g         Internal method           Tear Strength <sup>4</sup> -         ISO 6383-2         ISO 6383-2           MD: 50.0 µm         45.0         kN/m         ISO 6383-2           MD: 50.0 µm         25.0         kN/m         ISO 6383-2           Optical         Nominal Value         Unit         Test Method           Haze (50.0 µm, Blown Film)         15         %         ASTM D1003A           Additional Information         Nominal Value         Unit         Test Method           Film have been produced on Kiefel IBC Film Unite at 200 kg/h with a die of 200 mm and a die gap of 0.8 mm.         Sto Method           NOTE         Impact         Blown Film         Impact         Impact           1         Blown Film         Blown Film         Impact         Impact         Impact </th <th></th> <th></th> <th></th> <th></th>				
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Impact Strength (50.0 μm) <sup>1</sup> 300         J/cm         ASTM D4272           Blocking (50.0 μm) <sup>2</sup> 10         g         Internal method           Re-blocking (50.0 μm) <sup>3</sup> 10         g         Internal method           Tear Strength <sup>4</sup>	TD: Broken, 50 µm, blown film	> 500	%	ISO 527-3
Blocking (50.0 μm) 210gInternal methodRe-blocking (50.0 μm) 310gInternal methodTear Strength 4ISO 6383-2ISO 6383-2MD : 50.0 μm45.0kN/mISO 6383-2TD : 50.0 μm25.0KN/mISO 6383-2OpticalNominal ValueUnitTest MethodHaze (50.0 μm, Blown Film)15%ASTM D1003AAdditional InformationNominal ValueUnitTest MethodFilms have been produced on Kiefel IBC film burn line at 200 kg/h with a die of 200 mm and a die gap of 0.8 mm.Test MethodNOTE1.Blown FilmSim Film1.Blown FilmBlown FilmSim Film2.Blown FilmBlown FilmSim Film	Impact	Nominal Value	Unit	Test Method
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Additional Information     Nominal Value     Unit     Test Method       Films have been produced on Kiefel IBC film blown line at 200 kg/h with a die of 200 mm and a die gap of 0.8 mm.       NOTE       1.     Blown Film       2.     Blown Film       3.     Blown Film	Optical	Nominal Value	Unit	Test Method
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NOTE I. Blown Film I. Blown Film Blown Film Blown Film Blown Film	Additional Information	Nominal Value	Unit	Test Method
1.     Blown Film       2.     Blown Film       3.     Blown Film	Films have been produced on Kiefel IBC	film blown line at 200 kg/h with a	a die of 200 mm and a die gap of 0	).8 mm.
2. Blown Film 3. Blown Film	NOTE			
3. Blown Film	1.	Blown Film		
	2.	Blown Film		
4. Blown Film	3.	Blown Film		
	4.	Blown Film		

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