Barex® 210 Extrusion Grade

Barex 210 Extrusion Grade resin is an impact modified acrylonitrile-methyl acrylate copolymer with excellent gas barrier and a wide range of chemical resistance properties. It can easily be used for producing high barrier packaging by film and sheet extrusion, thermoforming, and extrusion blow molding.

Typical Physical Properties

The physical properties of Barex 210 Extrusion Grade resin summarized in this brochure are typical, or average properties measured in accordance with standard test methods. The information is the best currently available. However it is based on limited data and therefore subject to change without notice as new information becomes available.

Typical Properties of Barex 210 Extrusion Grade

General			
Density	72 lb/ft^3	1.15 g/cm^3	ASTM D792
Bulk Density	41 lb/ft^3	0.66 g/cm^3	ASTM D1895
Yield	24,080 in^2-mil/lb	34.2 m^2-25µm/kg	
Melt Index (1)	3 g/10 min	3 g/10 min	ASTM D1238
Mold Shrinkage	2-5x10^{-3} in/in	2-5x10^{-3} cm/cm	ASTM D955
Gas Permeability			
Oxygen (73 °F, 100% RH)	0.8 cm^3-mil/100 in^2-24 hrs-atm	0.3 cm^3-mm/m^2-24 hrs-bar	ASTM D3985
Nitrogen (73 °F, 100% RH)	0.2 cm^3-mil/100 in^2-24 hrs-atm	0.08 cm^3-mm/m^2-24 hrs-bar	ASTM D3985
Carbon Dioxide (73 °F, 100% RH)	1.2 cm^3-mil/100 in^2-24 hrs-atm	0.45 cm^3-mm/m^2-24 hrs-bar	ASTM D3985
Water Vapor (100°F, 90%RH)	5.0 g-mil/100 in^2-24 hrs-atm	2.0 g-mm/m^2-24 hrs-bar	ASTM F1249-90
Mechanical			
Tensile Strength, Yield	9,500 lb/in^2	65.5 MPa	ASTM D638
Elongation, Yield	3%	3%	ASTM D638
Flexural Strength, Yield	14,000 lb/in^2	96.5 MPa	ASTM D790
Flexural Modulus	490,000 lb/in^2	3.38 GPa	ASTM D790
Izod Impact (Notched)	5.0 ft-lb/in	267 J/m	ASTM D256
Hardness, Rockwell	M60	M60	ASTM D785
Thermal			
Heat Deflection Temperature	170°F (66 lb/in^2)	77°C (455 KPa)	ASTM D648
	156°F (264 lb/in^2)	69°C (1820 KPa)	
Thermal Conductivity	0.15 BTU/ft-hr-°F	0.25 W/m °K	ASTM C177
Specific Heat (20°C)	0.32 BTU/lb-°F	0.41 J/g-°C	ASTM C351
Linear Thermal Expansion (20-80°C)	3.7x10^{-5} in/in-°F	6.65x10^{-5} cm/cm-°C	ASTM D696
Optical (0.010" Thick Sheet)			
Yellowness Index, P5-78(2)	2.5	2.5	
Haze, P5-78(2)	2.7 %	2.7 %	
60° Gloss, P24-76(2)	120	120	
Transmittance, P5-78(2)	92.5 %	92.5 %	

(1) 200 °C , 27.5 lbs., 0.0824"D x 0.3145"L (2) INEOS Test Method.

Regulatory Information

The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an e-mail to: info.barex@ineos.com.

Health and Safety Information

The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The available product health and safety information for this material is contained in the Material Safety Data Sheet (MSDS) that may be obtained by calling 1-302-781-3128, or by sending an e-mail to: info.barex@ineos.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by INEOS is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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