NOPLA® KE101

(PEN+PET) Kolon Industries

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt flow index, MFI	**15**	g/10min	ISO 1133
Temperature	**275**	°C	-
Load	**2.16**	kg	-
Molding shrinkage, parallel	**0.6**	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	**8.1**	g/10min	ASTM D 1238
Temperature	**260**	°C	-
Load	**1.05**	kg	-
Mold Shrinkage, MD	**0.005**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Strength	**60**	MPa	ISO 527
Flexural modulus, 23°C	**2900**	MPa	ISO 178
Charpy notched impact strength, +23°C	**3.5**	kJ/m²	ISO 179/1eA
Rockwell hardness	**R 88**	-	ISO 2039-2
ASTM Data			
Tensile Strength	**60**	MPa	ASTM D 638
Flexural Modulus	**2854**	MPa	ASTM D 790
Flexural Strength	**92**	MPa	ASTM D 790
Rockwell Hardness	**R 88**	-	ASTM D 785

Thermal properties	Value	Unit	Test Standard
ISO Data			
Melting temperature, 10°C/min	**230**	°C	ISO 11357-1/-3
Temp. of deflection under load, 0.45 MPa	**75**	°C	ISO 75-1/-2
Burning behav. at thickness h	**V-2**	class	IEC 60695-11-10
Thickness tested	**0.8**	mm	-
ASTM Data			
UL 94 Flame rating	**V-2**	-	UL 94
Thickness tested	**0.8**	mm	-
Coefficient of Thermal Expansion, MD	**60**	E-6/K	ASTM D 696
DTUL @ 66 psi	**77**	°C	ASTM D 648
Melting Temperature	**234**	°C	ASTM D 3418

Optical properties	Value	Unit	Test Standard
ASTM Data			
Haze	**1**	%	ASTM D 1003
Light Transmittance	**85**	%	ASTM D 1003

Other properties	Value	Unit	Test Standard
Density	**1330**	kg/m³	ISO 1183
Density	**1330**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**140 - 160**	°C	-
Pre-drying - Time	**3 - 6**	h	-
Processing humidity	**≤0.08**	%	-
Mold temperature	**30 - 80**	°C	-
Zone 1	**160 - 210**	°C	-
Zone 2	**200 - 240**	°C	-
Zone 3	**220 - 250**	°C	-
Nozzle temperature	**230 - 265**	°C	-

Characteristics

Processing
Injection Molding

Features
Copolymer

Special Characteristics
Transparent

Regional Availability
North America, Asia Pacific