

INEOS Styrolution® GP-35

Terluran® GP-35 is high-flow, general purpose injection molding grade with good ductility, intended for moldings with thin walls and/or adverse flow length to wall ratio. Excellent colorability, High flowability, Good impact resistance, Good heat distortion resistance, High quality surface finish and gloss, Great mechanical strength and rigidity.

Applications: Injection molding, Thin wall components for telecommunications, Household and sanitary appliances, Toys, Automotive components, Electroplating.

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in ³	ISO 1183
Moisture Absorption at Equilibrium	0.24 % @Temperature 23.0 °C	0.24 % @Temperature 73.4 °F	50% RH; ISO 62
Water Absorption at Saturation	0.95 % @Temperature 23.0 °C	0.95 % @Temperature 73.4 °F	ISO 62
Linear Mold Shrinkage	0.0040 - 0.0070 cm/cm	0.0040 - 0.0070 in/in	ISO 294-4
Melt Flow	34 g/10 min @Load 10.0 kg, Temperature 220 °C	34 g/10 min @Load 22.0 lb, Temperature 428 °F	Volumetric; cm ³ /10 min; ISO 1133

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	102	102	ASTM Test
Ball Indentation Hardness	99.0 MPa	14400 psi	ISO 2039-1
Tensile Strength, Yield	44.0 MPa	6380 psi	ISO 527
Elongation at Break	12 %	12 %	Nominal; ISO 527
	>= 15 %	>= 15 %	ISO 527
Elongation at Yield	2.4 %	2.4 %	ISO 527
Tensile Modulus	2.30 GPa	334 ksi	ISO 527
Flexural Strength	65.0 MPa	9430 psi	ISO 178
Izod Impact, Notched	0.800 J/cm @Temperature -30.0 °C	1.50 ft-lb/in @Temperature -22.0 °F	ASTM Test
	0.850 J/cm @Temperature -18.0 °C	1.59 ft-lb/in @Temperature -0.400 °F	ASTM Test
	2.40 J/cm @Thickness 3.17 mm	4.50 ft-lb/in @Thickness 0.125 in	ASTM Test
Izod Impact, Notched (ISO)	7.00 kJ/m ² @Temperature -30.0 °C	3.33 ft-lb/in ² @Temperature -22.0 °F	ISO 180/A
	22.0 kJ/m ² @Temperature 23.0 °C	10.5 ft-lb/in ² @Temperature 73.4 °F	ISO 180/A
Charpy Impact Unnotched	9.00 J/cm ² @Temperature -30.0 °C	42.8 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
	12.5 J/cm ² @Temperature 23.0 °C	59.5 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
Charpy Impact, Notched	0.700 J/cm ² @Temperature -30.0 °C	3.33 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	1.90 J/cm ² @Temperature 23.0 °C	9.04 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA