Technical Specification



KCL Formi® 3D rPETG

Material KCL Formi® 3D rPETG is high impact resistance grade based on post-industrial and post-consumer PETG

thermoformed products (e.g. indoor/outdoor signage, vending machine panels, medical and industrial equipment

covers, thermoformed packaging and display systems).

Manufacturig PETG is collected, cleaned, shredded, and re-extruded and pelletized into rPETG granules.

Properties High impact resistance, good chemical resistance, no pre-drying needed.

Environment Made from 100% recycled PETG, reducing virgin plastic use. KCL Formi®3D rPETG is is fully recyclable and suitable

for energy recovery.

Physical and mechanical properties

Property	Test method	Transparent	Opaque
Density, g/cm ³	ISO 1183	1,27	1,27
Tensile strength, 50mm/min, N/mm ²	ISO 527-2	45	45
Tensile modulus, 1mm/min, N/mm²	ISO 527-2	2200	2200
Elongation at break, 50mm/min, %	ISO 527-2	4	4
Izod notched impact strength, unnotched +23 °C , kJ/m²	ISO 180/1A	11,5	11,5
Charpy impact strength, unnotched +23 °C , kJ/m ²	ISO 179-2/1eU	NB	NB
Linear coefficient of thermal expansion (23-70 °C), K ⁻¹	ISO 11359-2	51x10 ⁻⁶	51x10 ⁻⁶

 $\textbf{Pretreatment} \hspace{0.5cm} \textbf{KCL Formi} \text{$^{\circ}$ rPETG in not sensitive to moisture, no pre-drying needed.} \\$

Extrusion Recommended processing parameters for extrusion are:

Temperature profile from the nozzle 215/190/185/185 °C

Storage KCL Formi granulates should be protected from UV-light and stored in closed packages in dry conditions at temperature below 50 °C.

All information provided is based on our knowledge and experience. It is intended solely as a guide for the safe handling, use, processing, transport, storage, disposal, and release of the material, and should not be considered a guarantee or quality certification. You must adhere to all applicable rules, regulations, and guidelines when using the material. You are fully responsible for any claims or liabilities arising from your handling, use, processing, transport, storage, disposal, and release of the material