

STYRON™ CO2RE™ 688DI30 General Purpose Polystyrene Resin

Overview

STYRON™ CO2RE™ 688DI30 is a general purpose polystyrene resin containing 30% recycled polystyrene. It is designed for both moulding and extrusion applications. The balance between heat resistance, toughness and flow is exceptional. It also has good dimensional stability. STYRON™ CO2RE™ 688DI30 has a lower carbon footprint than virgin polystyrene.

Applications:

- Foamed PS sheets
- Thin wall packages
- Medium and heavy section applications in injection moulding

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.04 g/cm ³	1.04 g/cm ³	ISO 1183
Apparent (Bulk) Density	0.60 g/cm ³	0.60 g/cm ³	ISO 60
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	3.5 g/10 min	3.5 g/10 min	ISO 1133
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Stress (Yield)	6820 psi	47.0 MPa	ISO 527-2/5
Tensile Strain (Break)	2.0 %	2.0 %	ISO 527-2/5
Flexural Modulus	471000 psi	3250 MPa	ISO 178
Flexural Stress	13600 psi	94.0 MPa	ISO 178
Hardness	Nominal Value (English)	Nominal Value (SI)	Test Method
Ball Indentation Hardness	18900 psi	130 MPa	ISO 2039-1
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 264 psi (1.8 MPa), Annealed	203 °F	95.0 °C	ISO 75-2/A
Vicat Softening Temperature	225 °F	107 °C	ISO 306/A120
Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating ¹ (0.06 in (1.5 mm))	HB	HB	IEC 60695-11-10, -20