TYRIL™ 867 E UV 38784
SAN Resin

Overview

TYRIL™ styrene-acrylonitrile (SAN) resins are designed to offer superior chemical resistance, strength, hardness and dimensional stability in a broad range of product applications. The key property of TYRIL 867E is an excellent balance of physical properties. TYRIL 867 E UV is specifically designed to provide good processability, good chemical resistance, heat resistance, very good strength and optimal aesthetics (gloss and clarity). This UV stabilized version exhibits excellent weatherability, suitable in particular for extruded sheet and thermoforming applications.

Applications:

- Extruded sheets: shower cabinets and roofing.
- Aesthetics protection: advertising signs and glazing.

Physical	Nominal Value	(English)	Nominal Value	(SI)	Test Method
Density	1.08	g/cm³	1.08	g/cm³	ISO 1183
Apparent (Bulk) Density	0.69	g/cm³	0.69	g/cm³	ISO 60
Melt Mass-Flow Rate (MFR)					ISO 1133
220°C/10.0 kg	12	g/10 min	12	g/10 min	
230°C/3.8 kg	4.0	g/10 min	4.0	g/10 min	
Molding Shrinkage	3.0E-3 to 7.0E-3	in/in	0.30 to 0.70	%	ISO 294-4
Mechanical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Tensile Modulus	537000	psi	3700	MPa	ISO 527-1/1
Tensile Stress (Break)	10200	psi	70.0	MPa	ISO 527-2/5
Flexural Stress	14100	psi	97.0	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Unnotched Impact Strength					ISO 179/1eU
73°F (23°C)	8.1	ft·lb/in²	17	kJ/m²	
Unnotched Izod Impact Strength (73°F (23°C))	6.7	ft·lb/in²	14	kJ/m²	ISO 180
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Rockwell Hardness (M-Scale)	83		83		ISO 2039-2
Thermal	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Deflection Temperature Under Load					ISO 75-2/A
264 psi (1.8 MPa), Annealed	214	°F	101	°C	
Vicat Softening Temperature					
--	214	°F	101	°C	ISO 306/B50
--	230	°F	110	°C	ISO 306/A120
CLTE - Flow	2.8E-5	in/in/°F	5.0E-5	cm/cm/°C	ISO 11359-2
Electrical	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Electric Strength	230	V/mil	9.1	kV/mm	IEC 60243-1
Relative Permittivity (1 MHz)	3.00		3.00		IEC 60250
Dissipation Factor (1 MHz)	1.0E-4		1.0E-4		IEC 60250
Flammability	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Flame Rating [1] (0.06 in (1.5 mm))	HB		HB		UL 94

Additional Information

Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request.