TYRIL™ 795L
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™ 795L is its high flow that results in excellent processabiltiy, especially for large injection mnoulded parts. TYRIL™ 795L is specifically designed for end-use applications requiring a good balance of physical properties, optical properties (gloss, clarity or opaqueness), heat resistance and practical toughness. TYRIL™ 795L is designed to improve feeding and transportation of pellets into the screw, reduce shear heating inside the barrel and improve mould release.

Applications:

- Industrial batteries
- Home appliances: fridge trays, micro-wave windows and drying machine windows
- Kitchenware and consumer goods

Complies with:

- U.S. FDA 21 CFR 181.32
- European Food-Contact Compliance

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	21	g/10 min	21	g/10 min	
230°C/3.8 kg	9.0	g/10 min	9.0	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	551000	psi	3800	MPa	ISO 527-1/1
Tensile Stress (Break)	10400	psi	72.0	MPa	ISO 527-2/5
Flexural Modulus	522000	psi	3600	MPa	ISO 178
Flexural Stress	17100	psi	118	MPa	ISO 178
Impact	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Charpy Unnotched Impact Strength					ISO 179/1eU
73°F (23°C)	7.6	ft·lb/in²	16	kJ/m²	
Unnotched Izod Impact Strength (73°F (23°C))	6.2	ft·lb/in²	13	kJ/m²	ISO 180
Hardness	**Nominal Value**	**(English)**	**Nominal Value**	**(SI)**	**Test Method**
Rockwell Hardness (M-Scale)	84		84		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)	2.80		2.80		IEC 60250
Dissipation Factor (1 MHz)	1.0E-4		1.0E-4		IEC 60250