

DEXFLEX E118

DESCRIPTION:

DEXFLEX® E118 thermoplastic olefinic elastomer (TPO) is designed for extrusion and thermoformed applications that require thermal stability, excellent low-temperature properties, and good dimensional stability over a broad temperature range. This material can be supplied with or without UV stabilizers.

PROPERTY	TYPICAL VALUE	UNITS	Test Method
PHYSICAL			
Hardness	65	Shore D	ISO 868
Specific Gravity	1.03	—	ISO 1183
Melt Flow Rate (230°C, 2.16 kg load)	0.45	g/10 min.	ISO 1133 Condition M
Shrink	0.8 – 1.0	%	ASTM D955
MECHANICAL			
Flexural Modulus	220,000 (1,517)	psi (MPa)	ISO 178
Tensile Strength @ Yield	3,050 (21)	psi (MPa)	ISO 527-2/1A/50
Elongation @ Break	150	%	ISO 527-2/1A/50
Tear Strength	954 (167)	lb/in (N/mm)	ISO 34
Gardner Impact @ 23°C @ -30°C	>320 (36) >320 (36)	in*lb (J) in*lb (J)	ASTM D5420
Multi-Axial Impact @ -30°C (2.2 m/s) Ultimate Energy Failure Mode	248 (28) 100% Ductile	In*lb (J) -	ASTM D3763
THERMAL			
HDT @ 66 psi	205 (96)	°F (°C)	ISO 75 un-annealed
CLTE (-30°C to 80°C)	3.16 x 10 ⁻⁵ (5.7 x 10 ⁻⁵)	in/in/°F (mm/mm/°C)	ASTM D696 modified
FLAMMABILITY			
UL94 Flammability	HB (all colors)	—	Underwriters Laboratory Inc.
Burn Rate	24.2	mm/min.	FMVSS 302 (10/02)

