

NMPEF-1/2/4 Polyethylene foams

NMPEF-1/2/4 are closed cell, cross-linked polyethylene foams. They are available in sheet form, fabricated as gaskets or thermoformed into simple or complex shapes. A denser grade is available upon request. For more detailed technical data please contact NewMet.

Property	Test Method	Typical Values		
		NMPEF-1	NMPEF-2	NMPEF-4
Nominal Density (kg/m³)	BS ISO 7214 1998	15 ⁺¹	24	45
Cell Size (mm)	Internal	-	0.3	0.4
Compression Stress-Strain (kPa) 10% compression 25% compression 40% compression 50% compression	BS ISO 7214 1998	- 22 50 80	32 51 83 115	69 86 121 159
Compression Set (% set) 25% comp., 22hr, 23°C ½ hr recovery 24hr recovery 50% comp., 22hr, 23°C ½ hr recovery 24hr recovery	BS ISO 7214 1998 (25 mm cell-cell)	- - - 25 ⁺²	13 5.5 27 19	8.5 2.5 20 11
Tensile Strength (kPa) Tensile Elongation (%)	ISO 7214 1998	235 125	240 115	435 180
Tear Strength (N/m)	BS EN ISO 8067 1995	545	475	1200
Hardness Shore OO	ISO 868 1985	26	49	60
Recommended operating temperature range⁺³ (°C)	Internal	+95 max -70 min	+100 max -70 min	+105 max -70 min
Thermal Conductivity (W /m.K) mean temp of 10°C	ISO 8302 1991	0.046	0.0351	0.043
Flammability	FAR – 25.853 1a. 1ii	Complies	Complies	Complies

⁺¹ ISO 845

⁺² BS EN ISO 1856

⁺³ The maximum operating temperature shown is defined as the temperature which will typically cause a linear shrinkage of 5% after a 24hr exposure period, using sample dimensions of 100mm x 100mm x 25mm. This figure is provided for general guidance only. The actual level of shrinkage the foam will undergo at any particular temperature is dependent on a number of system variables such as, sample dimensions, cell size, loading conditions and exposure period.

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