

Product designation: XPE 45

Property	Indicative value	Unit	Test Standard
Density	45 ± 6	kg/m ³	ISO 845
Tensile Strength	> 240	kPa	ISO 1798
Tensile Elongation	> 120	%	ISO 1798
Compressive Strength			
deflection 10%	> 60		
deflection 25%	> 76	kPa	ISO 3386/1
deflection 50%	> 142		
Compression Set			
23 °C, 22 h charge, deflection 25%			
0.5 h after discharge	≤ 12	%	ISO 1856
24 h after discharge	≤ 5		
Thermal Conductivity			
at 10 °C	0,038	W/mK	DIN 52612
at 40 °C	0,041		
Working Temperature Range	-80/+90	°C	ISO 2796
Dimensional Stability	< 5%	%	ISO 2796
Water Absorption (7 days)	≤ 1	vol.%	DIN 53428
Specific Volume Resistance	≥ 10 ¹⁵	Ωcm	DIN 60093
Shore Hardness 00	> 46	-	internal
Horizontal Burn Rate	< 100	mm/min	FMVSS-302

This information is presented to our best knowledge. All test data are indicative values and should be considered as guidelines only.

Release date: 01 October 2018

Comments on the norms

Determination of bulk density DIN ISO 845

According to the norm the density is measured on the full thickness after removal of the skins. The test pieces are 100 mm x 100 mm x net thickness. Please note smaller pieces cutted out from the middle of the bun may have lower density.

Compressive Stress DIN ISO 3386-1

According to the norm the compressive strength is measured on a test specimen, which has a width/thickness ratio of 2:1 (50mm x 50mm x 25mm) and a surface of 25cm². The speed is 100mm/min.

Differing from the norm the force is read in the first cycle.

Determination of compression set DIN EN ISO 1856

Differing from the norm the test piece is deflected by 25% of its thickness and held for 22 h at room temperature of 23° C.

Test for dimensional stability DIN EN ISO 2796

Differing from the norm the specimen is tested only by dry conditions in a temperature but not humidity controlled chamber.