

Data Sheet Product

JLON Series Foam Core Material

The JLON series is a structural foam based on PET, offering excellent long-term fatigue resistance, making it an ideal core material for components subjected to long-term dynamic loads. Its molding temperature can be as high as 140 - 150°C, and it is suitable

for various resin systems and molding processes. Used as a high-performance core material in sandwich structures, it can meet the needs of different densities and various industries.

Performance of JLON Series Foam Products

Category	Standard	Unit	Result	HR80	HR100	HR150	HR200	HR250	HR320
Density	180 845	kg/m ³	Average Value	80	100	150	200	250	320
			Range	75~90	95~110	140~160	190~220	230~260	310~330
Compressive Strength	ISO 844:2006	MPa	Average Value	1.1	1.3	2.6	4.0	4.4	6.7
			Minimum Value	0.95	1.1	2.3	3.5	3.9	6.4
Compressive Modulus	ISO 844:2006	MPa	Average Value	100	110	170	220	250	370
			Minimum Value	80	90	140	180	200	340
Shear Strength	ISO 1922:2012	MPa	Average Value	0.75	0.8	1.35	1.6	1.75	2.2
			Minimum Value	0.65	0.7	1.2	1.4	1.65	2.0
Shear Modulus	ISO 1922:2012	MPa	Average Value	22	26	48	65	70	120

			Minimum Value	18	22	40	55	60	100
Tensile Strength	ASTM C297	MPa	Average Value	1.6	1.6	2.1	2.6	3.0	3.0
			Minimum Value	1.3	1.4	1.8	2.2	2.5	2.8
Tensile Modulus	ASTM C297	MPa	Average Value	110	120	155	190	215	340

(1)Note: The above data are average results for all products, taken from this product data. Please refer to the corresponding product specification based on the latest design requirements.

(2) Test Method: Measured in parallel direction.

Physical Characteristics of JLON Series Foam Products

- Good mechanical properties and fatigue resistance
- Multiple density specifications suitable for different application fields
- Closed-cell structure, low water absorption, mildew resistant
- Excellent processability, can be cut, easily bonded, and can be heat-formed into various curved shapes

Chemical Characteristics of JLON Series Foam Products

- Excellent heat resistance, long-term service temperature 120°C, short-term maximum service temperature
- Good thermal insulation, thermal conductivity as low as 0.027 W/m·K
- Green and environmentally friendly, thermoplastic and recyclable
- Excellent chemical stability and UV resistance

Specifications of JLON Series Foam Products

Category	Standard	Unit	HK80	HK100	HK150	HK200	HK250	HK320
BLOCK Spec	Length	mm	2500±10					
	Width	mm	1020±10					
	Thickness	mm	1200±10					

Note: The shelf life of JLON foam core material is 60 months. All data and technical information are based on results obtained under specific conditions defined by the referenced test standards. The customer is responsible for verifying the suitability of this product for the intended application. The customer is responsible for proper use and compliance with relevant building codes. JLON foam core material has taken all precautions to ensure the accuracy of the data provided in this document. All statements, technical data, and recommendations contained herein are believed to be correct at the time of publication. The above data is based on measurements of current production product dimensions. For the latest data, users are advised to contact the technical service department.

Application Fields of JLON Series Foam

Disclaimer:

This data sheet may be revised and changed due to material development and modifications. This data comes from test experiments. Unless specified as a minimum value, the data are average values. Actual results should be verified through practical testing. The data provided by the company is for reference only. The company assumes no liability and makes no warranty or representation regarding the material or its use. The company reserves the right to issue new, replacement data sheets.