

PCR FOAM

25% PCR Foam Material



Part Recycled Foam Material

PCR FOAM contains **25%** PCR (post-consumer recycled) polyethylene

Peregrine PCR

The 100% Recyclable, highly resilient closed-cell material, made from expanded polyethylene (EPE) bead foam. It is the ideal product for applications such as packaging and cushioning, expandable and returnable dunnage, thermal management and flotation.

Material Description:

- PCR contains 25% recycled material and, in turn, can be 100% recycled.
- Offers excellent shock absorption and repeated shock resistance.
- Its optimal density makes a volume-reduced, lighter and safer packaging option.
- Very good isothermal properties. Stable from -60 to 100 C.
- Chemically inert; free of chemicals and volatile organic compounds (VOC).
- Is an isotropic block material - the same energy absorption across all three planes.



Why PCR:

PCR Foam is one of the most effective packaging materials on the market, with the ability to absorb multiple impacts as well as being sustainable and lightweight. The thermally bonded polyethylene beads create a three-dimensional performance that absorbs and dissipates energy.

This isotropic behaviour means it is multidirectional in nature.

This same performance in all 3 axes combined with its fine surface protects surface-sensitive or painted goods and makes it an ideal product for protective packaging applications. The material is being used to make load carriers, CKD (Complete Knock Down) packaging, structural packaging, inserts and also die-cut products.

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Data Sheet



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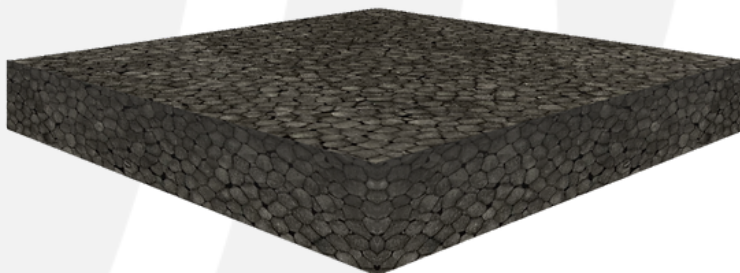
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Physical Properties

Test Method

Typical Result

• Length (mm)	ISO 1923	≥ 1,800
• Width (mm)	ISO 1923	≥ 1,200
• Thickness (mm)	ISO 1923	≥ 150
• Density (kg/m ²)	ISO 845	45
• Compressive Strength:		
◦ 25% strain (kPa)	ISO 7214	120
◦ 50% strain (kPa)	ISO 7214	200
• Tensile Strength (kPa)	ISO 7214	550
• Tensile Elongation	ISO 7214	60
• Compression Set:		
◦ Stabilising 30min (%)	ISO 7214	14
◦ Stabilising 24h (%)	25% - 22h loading	4
• Tear Strength (N/cm)	ISO 8067-B	40
• Hardness Shore 00	ISO 868	72
• Water Absorption	DIN 53428	<1
• Thermal Conductivity (W/(m.K)):		
◦ Test Temperature 10c	ISO 8301	0.042
◦ Test Temperature 23c	ISO 8301	0.043
• Service Temperature (C)	Internal	100
• Flammability	FMVSS302	PASS



This information is provided as a convenience to customers and reflects the results of external tests conducted on PCR samples. While all reasonable care has been taken to ensure that this information is accurate as of the date of issue, Peregrine MLS does not represent, warrant or otherwise guarantee, expressly or impliedly, the suitability, reliability or completeness of the information.