

MYcell-M PVC Foam Core

Closed-cell cross-linked PVC foam

Lightweight core for high-performance composite structures

MYcell-M is a closed-cell cross-linked PVC foam with a high strength-to-weight ratio. It combines low water and resin absorption with chemical resistance, thermoformability, thermal insulation and easy machining.

Features and advantages

- Superior shear strength.
- High resistance and rigidity despite its low weight.
- Low water and resin absorption.
- High thermal insulation capacity.
- Suitable for a wide range of sandwich structures.
- Self-extinguishing performance.
- Superior resistance to chemicals.
- Thermoformable and easy to machine.

Applications

MYcell-M is designed as a structural core for composite sandwich panels in marine, aeronautical, automotive, wind energy, sports equipment and general industrial applications.

Compatibility and supply options

Compatible with commonly used composite resins, including epoxy, polyester and vinyl ester. Available in a broad range of densities, formats and finishes to meet specific production requirements.

Certifications



DNV type-approved product



Russian Maritime Register
of Shipping

Product manufactured by Maricell. Technical information reproduced from the manufacturer's MYcell-M data sheet, version 1.1 dated 03/23.

MYcell-M Technical Properties

Typical values for cross-linked PVC foam grades

Property	Standard	Unit	M040	M048	M060	M080	M100	M130	M200	M250
Density (min.)	ISO 845	kg/m ³	40 (35)	48 (43)	60 (54)	80 (72)	100 (90)	130 (120)	200 (180)	250 (225)
Compressive strength	ISO 844:2014 B	MPa	0,52	0,62	0,98	1,60	2,05	3,22	5,07	6,88
Compressive modulus	ISO 844:2014 B	MPa	37	44	67	97	121	183	300	384
Shear strength	ISO 1922	MPa	0,47	0,52	0,79	1,20	1,48	2,44	3,44	4,37
Shear modulus	ISO 1922	MPa	15	16	21	30	36	55	77	98
Shear elongation at break	ISO 1922	%	6	7	18	19	25	32	35	35
Tensile strength	ASTM D 1623	MPa	0,71	0,98	1,82	2,74	3,18	4,35	6,26	7,19
Tensile modulus	ASTM D 1623	MPa	68	71	100	146	162	227	358	439
Indicative resin uptake (2 surfaces)	-	kg/m ²	0,96	0,73	0,72	0,53	0,54	0,51	0,36	/
Standard block dimensions	-	mm	1330 x 2850 x 84	1270 x 2730 x 80	1150 x 2450 x 78	1020 x 2180 x 72	950 x 2050 x 68	850 x 1900 x 58	750 x 1600 x 48	700 x 1500 x 47

Important notes

The figures shown are typical values and do not constitute a specification or warranty. Customers must verify the properties required for each specific application by carrying out the necessary tests on the product.