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www.maricell.it

# **MYcell-Y**

CRYOGENIC THERMAL INSULATING FOAM CORE

## **ADVANTAGES**



LOW THERMAL CONDUCTIVITY

WELL-SUITED TO ALL SANDWICH NEEDS

SUPERIOR INSULATION PROPERTIES

LOW RESIN ABSORPTION

EXCELLENT RESISTANCE TO CHEMICALS

HIGH RESISTENCE AT CRYOGENIC TEMPERATURE MYcell-Y is a closed cell cross-linked PVC foam with superior insulation properties for low and cryogenic temperature.

MYcell-Y stands out thanks to its superior mechanical properties, low water/ resin absorption, thermo-formability, insulation properties and workability. It is also compatible with the most popular resins used in composite structures, including epoxy, polyester and vinylester.

MYcell-Y is available in a wide range of format and finishes that meet specific customer needs.

#### **FIELDS OF APPLICATION**

MYcell-Y technical features, high performance and superior insulation properties make it an excellent choice for a variety of composite application. MYcell-Y can be used as a insulation material for LNG, building or composite material for marine, aeronautical, automotive, wind energy and sport equipment sector, carrying trade in addition to various industrial fields.

### SUSTAINABLE GRADES

**ecoGreEN** eco-variant of MYcell reduces the carbon footprint by incorporating raw materials produced using energy from renewable sources.

**ECOBILE** eco-variant of MYcell takes carbon footprint reduction a step further. MYcell EcoBlue incorporates raw materials derived from agricultural and industrial waste, all produced using energy from renewable sources.







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# TECHNICAL DATA SHEET TYPICAL VALUES

CRYOGENIC THERMAL INSULATING FOAM CORE

FOAM			Y033	Y040	Y060	Y100
Density	ISO 845 (min)	kg/m³	33 (25)	40 (35)	60 (54)	100 (90)
Compressive strength	ISO 844:2014 B	MPa	0,41	0,52	0,98	2,05
Compressive modulus	ISO 844:2014 B	MPa	43	37	67	121
Shear strength	ISO 1922	MPa	0,31	0,47	0,79	1,48
Shear modulus	ISO 1922	MPa	11	15	21	36
Shear elongation at break	ISO 1922	%	6	6	18	25
Tensile strength	ASTM D 1623	MPa	0,53	0,71	1,82	3,18
Tensile modulus	ASTM D 1623	MPa	39	68	100	162
Thermal conductivity	ASTM C177	W/(m*K)	0,028	0,028	0,029	0,029
Standard block dimensions		mm	1385 2935 93	1330 2850 84	1150 2450 78	950 2050 68

The data given here are the results of tests carried out by various laboratories. Unless explicitly defined as a minimum value, it should be considered as a typical average value. The data sheet is subject to revision. The specific use must be verified by suitable tests. The data does not represent a guarantee for the use of the material. This data sheet does not constitute a liability for the company. Please check the last version (MS050 rev1.2 02/2025).