



TECHNICAL DATA

Divinycell CY

THE HIGH PERFORMANCE INSULATION FOAM

Divinycell is a high strength, closed cell, co-polymer foam with excellent insulation properties. It is especially suitable as insulation in low and cryogenic temperatures, featuring very low thermal conductivity. Resistance to hydrocarbons makes it the perfect material for LNG storage insulation. Divinycell has a long track record as insulation in LNG Carriers as well as bottom insulation in land based LNG storage tanks.

A special grade, Divinycell CY, is approved rigid insulation for the GTT (Gas Transport & Technigaz) N096 design both as insulating and supporting type and have exceptional compressive properties parallel to the plane. Easy cutting and machining is another attractive feature of the foam, appreciated by manufacturers and installers.

MECHANICAL PROPERTIES DIVINYCELL® CY

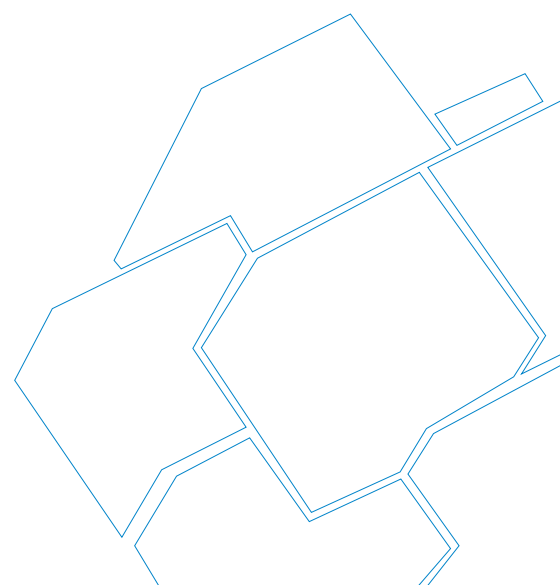
Property	Test Procedure	Remarks	Unit	CY33	CY55	CY100
Compressive Strength ¹	ASTM D1621	-	MPa	≥ 0.19	≥ 0.65	≥ 1.5
Compressive Modulus ¹	ASTM D1621-B-73	-	MPa	≥ 9	≥ 28,5	≥ 66
Deformation due to Creep ¹	ISO 7850	At 0.24 MPa for 1000 hrs	%	N/A ²	< 1% ~	< 1% ~
Thermal Conductivity	ASTM C 518	See graph on page 2	W/mK	< 0.030	< 0.030	< 0.036
Thermal Contraction Coefficient	ASTM E 228	Between +20°C and -196°C	1/°C	~ 40*10 ⁻⁶	~ 40*10 ⁻⁶	~ 40*10 ⁻⁶
Nominal Density	ASTM D 1622	-	kg/m ³	38	60	120

1. Parallel to the plane
2. Not Applicable being CY33 insulating material only

Nominal value is an average value of a mechanical property at a nominal density

PRODUCT CHARACTERISTICS

- Excellent cryogenic insulation
- High mechanical properties
- Resistant to hydrocarbons
- Low water absorption
- Closed cell
- Low thermal expansion
- Fast and easy to machine
- Non friable
- Good creep behaviour



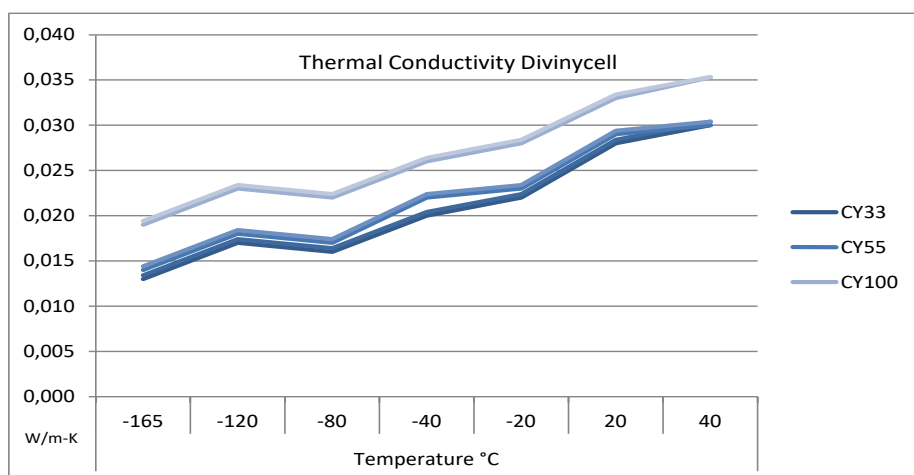
TECHNICAL CHARACTERISTICS

THERMAL CONDUCTIVITY DIVINYCELL® CY

Material	Temperature °C						
	-165	-120	-80	-40	-20	20	40
CY33	0,013	0,017	0,016	0,020	0,022	0,028	0,030
CY55	0,014	0,018	0,017	0,022	0,023	0,029	0,030
CY100	0,019	0,023	0,022	0,026	0,028	0,033	0,035

Continuous operating temperature is typically -200°C to +70°C.

Maximum processing temperature is dependent on time, pressure and process conditions. Therefore users are advised to contact Diab Technical Services to confirm that Divinycell CY is compatible with their particular processing parameters.



Format		Unit	CY33	CY55	CY100
Plain sheets	Length	mm	2650	2650	2000
	Width	mm	1250	1220	1000

Disclaimer:

This data sheet may be subject to revision and changes due to development and changes of the material. The data is derived from tests and experience. If not stated as minimum values, the data is average data and should be treated as such. Calculations should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use. The company reserves the right to release new data sheets in replacement.

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