

MEGOLON IN700

Alphagary - Thermoplastic

General Information

Product Description

MEGOLON® IN700 is a thermoplastic, halogen free, fire retardant cable compound, which possess excellent insulation properties. MEGOLON® IN700 is suitable for the insulation of conductors operating at temperatures up to a maximum of 90°C.

APPLICATIONS

- Spain: UNE 211002
- Germany: DIN VDE 0207 part 23, type HJ2
- CENELEC: EN 50363-7, types TI6 and TI7. MEGOLON® IN700 also meets the requirements of EN 50363-3 for a general purpose PVC insulation compound compound

General

Features	• Flame Retardant	• Halogen Free
Uses	• Insulation	• Wire & Cable Applications
Agency Ratings	• DIN VDE 0207 Part 23, Type HJ2 • EN 50363-3	• EN 50363-7 Type TI6 • EN 50363-7 Type TI7
Processing Method	• Wire & Cable Extrusion	

Properties¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.49		ASTM D792
Melt Mass-Flow Rate (MFR) (150°C/21.6 kg)	5.5	g/10 min	ISO 1133
Mechanical	Nominal Value	Unit	Test Method
Tensile Stress			
--	2030	psi	IEC 60811-501
-- ²	1890	psi	IEC 60811-401
-- ³	1810	psi	IEC 60811-401
-- ⁴	1960	psi	IEC 60811-401
Tensile Strain			
Break	220	%	IEC 60811-501
Break ²	140	%	IEC 60811-401
Break ³	140	%	IEC 60811-401
Break ⁴	170	%	IEC 60811-401
Elastomers	Nominal Value	Unit	Test Method
Tear Strength	54.2	lbf/in	BS 6469 99.1
Hardness	Nominal Value	Unit	Test Method
Durometer Hardness (Shore D)	55		ASTM D2240
Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature ⁵	-23.8	°F	ASTM D746
Hot Pressure Test (194°F)	20	%	IEC 60811-508

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Aging	Nominal Value	Unit	
Change in Tensile Strength in Air			
176°F, 168 hr	-4.0	%	
212°F, 240 hr	-7.0	%	
230°F, 168 hr	11	%	
Change in Tensile Strain at Break in Air			
176°F, 168 hr	-17	%	
212°F, 240 hr	-32	%	
230°F, 168 hr	-28	%	
Electrical	Nominal Value	Unit	Test Method
Dielectric Constant (10 MHz)	3.40		ASTM D150
Dissipation Factor (10 MHz)	0.014		ASTM D150
Insulation Resistance			BS 6469 99.2
68°F	5.0E+14	ohms·cm	
after 12 hours immersion in water : 68°F	3.0E+14	ohms·cm	
after 2 hours immersion in water : 158°F	1.0E+12	ohms·cm	
after 2 hours immersion in water : 176°F	6.0E+11	ohms·cm	
after 2 hours immersion in water : 194°F	4.0E+11	ohms·cm	
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	35	%	ISO 4589-2

Notes

¹ Typical properties: these are not to be construed as specifications.

² after 10 days at 100°C

³ after 7 days at 110°C

⁴ after 7 days at 80°C

⁵ F50