

megolon S552

Sheathing Grade Compound

DESCRIPTION

MEGOLON™ S552 is a thermoplastic, halogen free, fire retardant cable sheathing compound with enhanced resistance to degradation by hot water, formulated specifically to meet the requirements of UK specification BS 7655:6.1 type LTS4.

APPLICATIONS

- UK: BS7655:6.1 type LTS4. Also meets the requirements of BS7655:6.1 types LTS1, LTS2, LTS3 and BS7655:4.1 type TM1 for a general purpose PVC sheathing compound
- Germany: DIN VDE 0207, part 24, type HM4. Also meets the requirements of DIN VDE 0207, part 24, type HM2

TECHNICAL PROPERTIES

Primary Properties	Unit	Nominal Value	Test Method
Tensile strength	MPa	14	IEC 60811-1-1
Elongation at break	%	200	IEC 60811-1-1
Oxygen Index	%	36	ISO 4589-2
Density	g/cc	1.51	ASTM D-792
Melt Flow Rate (21.6 kg, 150°C)	g/10 mins.	5.5	ISO 1133

Mechanical Properties

Tear strength	N/mm	8	BS 6469:99.1
Tensile strength after 7 days at 110°C	MPa	17	IEC 60811-1-2
Variation	%	+20	
Elongation at break after 7 days at 110°C	%	170	IEC 60811-1-2
Variation	%	-15	
Tensile strength after 7 days at 100°C	MPa	15	IEC 60811-1-2
Variation	%	+5	
Elongation at break after 7 days at 100°C	%	170	IEC 60811-1-2
Variation	%	-15	

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Thermomechanical Properties	Unit	Nominal Value	Test Method
Hot pressure at 90°C	%	35	IEC 60811-3-1

Fire and Smoke Test Properties

Flammability temperature index	°C	280	ISO 4589-3
Halogen acid gas evolution	%	ZERO	IEC 60754-1
Corrosivity of gases			IEC 60754-2
pH		5.7	
Conductivity	µS/cm	4	
Smoke density – Flaming mode	Ds max	60	ASTM E-662
Time to maximum	minutes	12	
Smoke density – Non-flaming mode	Ds max	140	ASTM E-662
Time to maximum	minutes	12	
Toxicity index		0.6	NES 713

Oil Resistance Properties

Medium	Temperature	Duration	Tensile Strength (MPa)	Variation (%)	Elongation at Break (%)	Variation (%)
IRM 902	23°C	7 days	14.5	+5	220	+10
IRM 902	70°C	4 hours	13.5	-5	210	+5
SAE 20	70°C	4 hours	13.5	-5	180	-10
IRM 903	23°C	7 days	12.5	-10	160	-20

Electrical Properties

Electrical Properties	Unit	Nominal Value	Test Method
Dielectric constant at 50Hz			ASTM D-150
Dissipation factor at 50Hz			ASTM D-150
Insulation resistance at 20°C			BS 6469:99.2
After 12 hours immersion in water	ohm.cm	1 x 10 ¹⁴	

Other Properties

Hardness	Shore D	59	ASTM D-2240
Water immersion – 7 days at 70°C			BS 6469:99.1
Variation of tensile strength	%	-12	
Variation of elongation at break	%	-5	

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