



megölön S500

Sheathing Grade Compound

DESCRIPTION

MEGOLON™ S500 is a thermoplastic, halogen free, fire retardant cable sheathing compound for general purpose applications. It exhibits good processing characteristics - using a low compression, MEG type screw, processing speeds similar to those of PVC can be achieved. It can also be processed on a simple PVC screw at lower speeds.

APPLICATIONS

UK: BS 7878: 7 (HD 624.7 S1)

Germany: DIN VDE 0207, part 24, type HM2
France: Norme Française NF C 32-323

TECHNICAL PROPERTIES

Primary Properties	Unit	Nominal Value	Test Method
Tensile strength	MPa	11	IEC 60811-1-1
Elongation at break	%	180	IEC 60811-1-1
Oxygen Index	%	35	ISO 4589-2
Density	g/cc	1.46	ASTM D-792
Melt Flow Rate (21.6 kg, 150°C)	g/10 mins.	6	ISO 1133
Mechanical Properties			
Tear strength	N/mm	6.5	BS 6469:99.1
Tensile strength after 7 days at 100°C	MPa	12.5	IEC 60811-1-2
Variation	%	+12	
Elongation at break after 7 days at 100°C	%	148	IEC 60811-1-2
Variation	%	-18	

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Thermomechanical Properties

Hot press	cure at 80°C			%	25		IEC 60811-3-1
Hot pressure at 80°C Hot deformation at 90°C			%	5		BS 6469:99.1	
Cold elongation at –25°C			%	96		IEC 60811-1-4	
Cold impact at –25°C			%	PASS		IEC 60811-1-4	
3010 Impact at -20 0			70	FAGG		120 000 11-1-4	
Fire and Smoke Test Properties			Unit	Nominal		Test Method	
i ii c aii	a officient	ost i topo	11103	•	Valu	-	
Flammability temperature index				°C	255		ISO 4589-3
Halogen acid gas evolution				%	ZERC)	IEC 60754-1
Corrosivity of gases						IEC 60754-2	
	рН				6.3		
Conductivity				μS/cm	13		
Smoke density – Flaming mode				Ds max	57		ASTM E-662
Time to maximum				minutes	7		
Smoke density – Non-flaming mode			Ds max	278		ASTM E-662	
Time to maximum			minutes	12			
Toxicity index				1.5		NES 713	
Oil Bos	iotopoo Dra	. nortico	Tensile		Elongation		Volume
Oli Res	sistance Pro	pperties	Strength	Variation	at Break	Variatio	
							(%)
Medium	Temperature	Duration	(MPa)	(%)	(%)	(%)	(/0)
Medium IRM 902	Temperature 23°C	Duration 7 days	` ,			(%) -6	(<i>7</i> 6) +4
		Duration 7 days 4 hours	10.5	-5	170		
IRM 902	23°C	7 days	` ,			-6	+4
IRM 902 IRM 902	23°C 70°C	7 days 4 hours	10.5 10	-5 -9	170 200	-6 +11	+4 +1
IRM 902 IRM 902 SAE 20 IRM 903	23°C 70°C 70°C 23°C	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26 -14	170 200 210 160	-6 +11 +17 -11	+4 +1 n/a +20
IRM 902 IRM 902 SAE 20 IRM 903	23°C 70°C 70°C	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26	170 200 210 160 Nomi r	-6 +11 +17 -11	+4 +1 n/a
IRM 902 IRM 902 SAE 20 IRM 903	23°C 70°C 70°C 23°C cal Properti	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26 -14	170 200 210 160 Nomir Valu	-6 +11 +17 -11	+4 +1 n/a +20 Test Method
IRM 902 IRM 902 SAE 20 IRM 903 Electric	23°C 70°C 70°C 23°C cal Properti	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26 -14	170 200 210 160 Nomir Valu 4.3	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dielectric Dissipatio	23°C 70°C 70°C 23°C cal Properti	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26 -14	170 200 210 160 Nomir Valu	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150 ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dielectric Dissipatio	23°C 70°C 70°C 23°C cal Properti constant at 50l on factor at 50H n resistance at 2	7 days 4 hours 4 hours 7 days	10.5 10 8.5	-5 -9 -26 -14 Unit	170 200 210 160 Nomir Valu 4.3 0.018	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dielectric Dissipatio Insulation	23°C 70°C 70°C 23°C cal Properti constant at 50H on factor at 50H or resistance at 2 itial value	7 days 4 hours 4 hours 7 days es Hz z 20°C	10.5 10 8.5 9.5	-5 -9 -26 -14 Unit	170 200 210 160 Nomir Valu 4.3 0.015	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150 ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dielectric Dissipatio Insulation	23°C 70°C 70°C 23°C cal Properti constant at 50l on factor at 50H n resistance at 2	7 days 4 hours 4 hours 7 days es Hz z 20°C	10.5 10 8.5 9.5	-5 -9 -26 -14 Unit	170 200 210 160 Nomir Valu 4.3 0.018	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150 ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dislectric Dissipatio Insulation In	23°C 70°C 70°C 23°C cal Properti constant at 50H on factor at 50H or resistance at 2 itial value	7 days 4 hours 4 hours 7 days es Hz z 20°C	10.5 10 8.5 9.5	-5 -9 -26 -14 Unit	170 200 210 160 Nomir Valu 4.3 0.015	-6 +11 +17 -11	+4 +1 n/a +20 Test Method ASTM D-150 ASTM D-150
IRM 902 IRM 902 SAE 20 IRM 903 Electric Dislectric Dissipation In Af	23°C 70°C 70°C 23°C cal Properti constant at 50H n resistance at 2 itial value fter 12 hours im	7 days 4 hours 4 hours 7 days es Hz z 20°C mersion in w	10.5 10 8.5 9.5	-5 -9 -26 -14 Unit	170 200 210 160 Nomir Valu 4.3 0.015	-6 +11 +17 -11 nal e	+4 +1 n/a +20 Test Method ASTM D-150 ASTM D-150

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Shore D

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Hardness

Ozone resistance

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ASTM D-2240

ASTM D-470

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PASS

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