

Conductive – High Consistency Silicone Rubber (HCR)

Type – Silver coated Glass filled. (Ag/Glass)

Characteristics

Vulcanised articles manufactured from this silver coated, glass filled, conductive silicone rubber compound, typically used in commercial applications, exhibit a unique combination of characteristics and properties. They are noted for their good flexibility, mechanical properties, good shielding / conductive properties & very good processing characteristics. Suitable for moulding applications only.

Product Data

Material Reference:	PR 660 Series – Moulding
Special Features:	<ul style="list-style-type: none"> • Designed to meet; MIL-G-83528 Type M • Suitable for the manufacture of parts for EMI/RFI electrical shielding applications • Good performance in <i>non</i>-corrosive environments • Good electrical conductivity • Good EMP resistance • Service temperature range: –60°C to +125°C (excursions up to 150°C)

Colour: Tan (Natural)

Safety Information

Detailed safety specific information can be obtained from the Material Safety Data Sheets (MSDS), which are available upon request.

Physical Properties

Test	Standard	Units	Typical Values			
			50 +/- 5	60 +/- 5	70 +/- 5	80 +/- 5
Hardness	ASTM D2240	Shore A	50 +/- 5	60 +/- 5	70 +/- 5	80 +/- 5
Density	ASTM D792	g/cm ³	-	1.75	1.78	-
Tensile Strength	ASTM D412	MPa	-	2.3	2.4	-
Elongation @ Break	ASTM D412	%	-	170	200	-
Tear Strength	ASTM D624 C	kN/m	-	11	10	-
Compression Set: 70 Hrs @ 100°C	ASTM D395 (Method B)	%	-	30	35	-

Electrical Properties

Volume Resistivity	ASTM D991 – 89	Ohm/cm	-	0.04	0.03	-
Shielding Effectiveness:	MIL-G-83528					
200 KHz (H Field)		dB	-	50	-	-
100 MHz (E Field)		dB	-	100	100	-
500 MHz (E Field)		dB	-	100	100	-
2 GHz (Plane Wave)		dB	-	90	90	-
10 GHz (Plane Wave)		dB	-	80	80	-

Typical Cure Conditions

Press-cure	10 minutes @ 170°C
Post-cure	2 hours @ 150°C
Catalyst type	Dicumyl Peroxide or DHBP

This data is obtained from test pieces moulded in the laboratory and are intended as a guide. They should not be used in preparing specifications.

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