



Conductive – High Consistency Silicone Rubber (HCR)

Type – Silver filled. (Ag)

Characteristics

Vulcanised articles manufactured from this silver filled, conductive silicone rubber compound, typically used in military / aerospace applications, exhibit a unique combination of characteristics & properties. They are noted for their good flexibility, mechanical properties, the highest shielding / through conductive properties possible & good processing characteristics. Suitable for moulding applications only.

Product Data

- Material Reference:** PR 670 Series – Moulding
- Special Features:**
- Designed to meet; MIL-G-83528 Type E
 - Suitable for the manufacture of parts for EMI/RFI electrical shielding applications
 - Highest shielding and through conductivity
 - Excellent EMP resistance
 - Service temperature range: –60°C to +200°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			
Hardness	ASTM D2240	Shore A	50 +/- 5	60 +/- 5	70 +/- 5	80 +/- 5
Density	ASTM D792	g/cm ³	-	3.50	3.55	-
Tensile Strength	ASTM D412	MPa	-	2.2	2.2	-
Elongation @ Break	ASTM D412	%	-	375	325	-
Tear Strength	ASTM D624 C	kN/m	-	11	12	-
Compression Set: 70 Hrs @ 100°C	ASTM D395 (Method B)	%	-	30	32	-

Electrical Properties

Volume Resistivity	ASTM D991 – 89	Ohm/cm	-	0.002	0.002	-
Shielding Effectiveness:	MIL-G-83528					
200 KHz (H Field)		dB	-	70	70	-
100 MHz (E Field)		dB	-	120	120	-
500 MHz (E Field)		dB	-	120	120	-
2 GHz (Plane Wave)		dB	-	120	120	-
10 GHz (Plane Wave)		dB	-	120	120	-

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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