

Conductive – High Consistency Silicone Rubber (HCR)

Type – Silver coated Aluminium filled. (Ag/Al)

Characteristics

Vulcanised articles manufactured from this silver coated aluminium 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, very good shielding / conductive properties & good processing characteristics. Suitable for moulding applications only.

Product Data

Material Reference: PR 620 Series – Moulding

- Special Features:**
- Designed to meet; MIL-G-83528 Type B
 - Suitable for the manufacture of parts for EMI/RFI electrical shielding applications
 - Military gasket material of choice for corrosive environments
 - Very good electrical conductivity
 - Good EMP resistance
 - Service temperature range: –60°C to +160°C (excursions up 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	-	1.95	2.00	2.05
Tensile Strength	ASTM D412	MPa	-	2.10	2.35	2.40
Elongation @ Break	ASTM D412	%	-	255	220	190
Tear Strength	ASTM D624 C	kN/m	-	11	11	10
Compression Set: 70 Hrs @ 100°C	ASTM D395 (Method B)	%	-	26	28	30

Electrical Properties

Volume Resistivity	ASTM D991 – 89	Ohm/cm	-	0.008	0.007	0.007
Shielding Effectiveness:	MIL-G-83528					
200 KHz (H Field)		dB	-	60	60	60
100 MHz (E Field)		dB	-	115	115	115
500 MHz (E Field)		dB	-	110	110	110
2 GHz (Plane Wave)		dB	-	105	105	105
10 GHz (Plane Wave)		dB	-	100	100	100

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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