

Data Sheet

Rail45 Silicone 70 Shore to EN45545-2

Data Sheet Type	Final
Material Reference	Rail45 Silicone
Polymer	Silicone
Date Issued	20/05/24



Description

A high performance Silicone Rubber Sheeting with excellent Flame Retardant properties, and Low Smoke and Low Toxicity performance characteristics. The material meets many of the main international Flame Retardant standards for the Rail Industry including:

EN45545-2 HL3, BS6853 Cat 1a, NF F-16-101 Categories F1 & I2, DIN 5510-2, LUL 1-085 A2 Table 4, UL94 V0 (3mm).

Specifications	Values	Test Methods
Brittle Point	-80 °C	ASTM D746
Colour	Grey	None
Compression Set(22 Hours @ 175°C)	20 %	ISO 815
Density	1.24 g/cm ³	ISO 2781
Dielectric Constant	3	IEC 60093
Dielectric Strength	23 kv/mm	VDE0303
Elongation at Break	320 %	ISO 37
Highest Recommended Working Temperature	230 °C	None
Intermittent Working Temperature	250 °C	None
Lowest Recommended Working Temperature	-60 °C	None
Shore Hardness (Shore A)	70 ° Shore	ASTM D2240
Tear Strength	19 KN/m	ASTM D395 Method B
Tensile Strength	10 MPA	ISO 37
Thermal Conductivity	0.24 W/m.K	VDE0304
Volume Resistivity	8.1 x 10 ⁽¹⁵⁾ Ohms cm	IEC60250

Purposes



Flame Retardent



High Working Temperature



Low Working Temperature

Important Notes about this Material Data Sheet

This datasheet has been carefully compiled to advise you, our customer, in the best possible way. The information, figures, test values, and data correspond to actual engineering standards and are the result of many years of tests and trials. As individual operating conditions influence the application of each product, the information supplied in this datasheet can only be seen as a rough guideline. In every case it is the sole responsibility of the customer to evaluate his individual requirements, in particular whether the specified properties of our products are sufficient for the intended use. This datasheet is subject to alteration without prior notice. All mentioned values contained herein are guiding values representing long-term experience averages. Please be aware that Test Results for individual Material Batches will only be provided if requested at the time of order and may be subject to additional charges and/or lead times. This Data Sheet supersedes all previous data sheets and any other data previously provided either Verbally, Electronic or Written, with reference to the above Material Grade.