

Data Sheet Compashield Conductive Silicone Rubber Nolato 8641

Nolato 8641 is a material used for moulded components.

Nolato 8641 key properties

- Operating temperatures are between -55°C and $+125^{\circ}\text{C}$.
- Silicone rubber can easily stand heat, cold, moisture, UV, ozone and pressure over long times.
- In environmental tests this material has proved none or only slight deterioration of conductivity and shielding effect.

1. Applications

Nolato 8641 is a material used to produce EMI shielding gaskets or electrically conductive silicone rubber components by moulding.

2. Typical Product Data

	8641
Base Material	Silicone Rubber
Conductive filler	Ni/C

2.1. Mechanical Properties

	Test procedure	Unit	8641
Density, cured	ISO 2781	g/cm^3	1,8
Hardness	ISO 48-4	Shore A	55
Tensile strength ¹⁾	ISO 37	MPa	1,1
Elongation at break	ISO 37	%	280
Tear strength ²⁾	ISO 34-1C	N/mm	7,2
Compression set, 72 hours/100°C	ISO 815	%	25
Flammability ³⁾	UL 94		V1

1) 1 MPa = 145 psi 2) 1 N/mm = 5,71 lb/in 3) UL file no. OCDT2.E471560

2.2. Electrical and Shielding Properties

	Test procedure	Unit	8641
Volume resistivity, as moulded	MIL-DTL-83528C	mOhmcm	30
Volume resistivity, aged 48h/156°C	MIL-DTL-83528C	mOhmcm	40
Average shielding effect, 0,3-20 GHz	Nolato cavity to cavity test method	dB	130

3. Processing

The material is a one component, peroxide cured silicone system. For detailed information please refer to the "Compashield mixing and handling instruction".

4. RoHS Information

Nolato 8641 fulfils the requirements set by the EU Directive 2011/65 (RoHS).

5. Safety Instructions

Nolato 8641 is according to EU directive 1272/2008 (CLP) classified as hazardous, due to the content of nickel. Nickel may cause sensitisation by skin contact. It is advisory to never touch the gasket without gloves. A material safety data sheet can be sent on request.

6. Warranty

The recommendations and data given are based on our experience to date, however, no liability can be assumed in connection with their usage and processing. Typical property data should not be used as a specification.