

Data Sheet Compashield Conductive Silicone Rubber Nolato 8642

Nolato 8642 is a material used for extruded components.

Nolato 8642 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 8642 is a material used as an electrically conductive material in co-extruded Compashield EE gaskets.

2. Typical Product Data

| | 8642 |
|-------------------|-----------------|
| Base Material | Silicone Rubber |
| Conductive filler | Ni/C |

2.1. Mechanical Properties

| | Test procedure | Unit | 8642 |
|---------------------------------|----------------|-----------------|------|
| Density, cured | ISO 2781 | g/cm^3 | 2,4 |
| Hardness | ISO 48-4 | Shore A | 80 |
| Tensile strength ¹⁾ | ISO 37 | MPa | 4,1 |
| Elongation at break | ISO 37 | % | 160 |
| Tear strength ²⁾ | ISO 34-1C | N/mm | 15 |
| Compression set, 72 hours/100°C | ISO 815 | % | 35 |
| Flammability ³⁾ | UL 94 | | V0 |

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 | 8642 |
|--------------------------------------|-------------------------------------|--------|------|
| Volume resistivity, as moulded | MIL-DTL-83528C | mOhmcm | 17 |
| Volume resistivity, aged 48h/156°C | MIL-DTL-83528C | mOhmcm | 42 |
| Average shielding effect, 0,3-20 GHz | Nolato cavity to cavity test method | dB | 130 |

3. Processing

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

4. RoHS Information

Nolato 8642 fulfils the requirements set by the EU Directive 2011/65 (RoHS).

5. Safety Instructions

Nolato 8642 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.