

CarboFlex



CarboFlex are electrically conductive silicone resins filled with carbon nanoparticles. The large degree of flexibility of the materials shows the way for using CarboFlex products in all applications calling for a silicone-based sealing compound with electrical conductivity.

CarboFlex are electrically conductive, dual-component systems consisting of silicone resins filled with carbon nanoparticles. Fillings are selected to match the particular application and the electrical and mechanical properties aimed at. There are both addition cross-linking and condensation cross-linking systems.

Products of the **CarboFlex** series are notable especially for the following:

- specific electrical resistance up to $400\Omega\cdot\text{cm}$,
- high flexibility accompanied by high electrical conductivity,
- very much improved mechanical properties compared to conventional electrically conductive sealing compounds,
- creation of specific electrical and mechanical properties by different degrees of filling,
- high thermal conductivity.

The excellent electrical properties of the carbon nanoparticles allow a low degree of filling. That maintains the good elastic properties of the silicone resins.

CarboFlex is used where good electrical conductivity and high elasticity are needed, for example:

- antistatic sealing compounds (sealing rings),
- antistatic hoses,
- sealing materials with extra thermal conductivity,
- cable sheaths,
- thermally conductive molds and solid materials.

Specific electrical resistance

