

**NEW**

**E-CTFE (Halar®)**

**thermoplastic fluoroplastic coating**

Electrically conductive and FDA-conform



## Technical properties

### The types

E-CTFE (**Halar®**) is probably the most versatile partially fluorinated plastic used in heavy-duty corrosion protection. Five versions of the Halar® coating are now available:

- E-CTFE (**Halar®**) standard, colour green
- E-CTFE (**Halar®**) FDA-approved, colour pearl white
- E-CTFE (**Halar®**) with higher diffusion resistance, colour beige
- E-CTFE (**Halar®**) electrically conductive and FDA-conform colour grey or black



Application of the layer also on difficult to access or complex geometries, e.g. reaction tanks with coated heating coils.

### Main features of E-CTFE (Halar®)

All these versions have the following properties:

- excellent universal chemical resistance in accordance with resistance list
- very high abrasion resistance
- excellent elasticity and impact resistance
- weather resistance
- repairable by welding with hot air
- layer thicknesses 300 – 1500 µm



Features	Unit	Halar® standard	Halar® with FDA approval	Halar® diffusion-resistant	Halar® electrically conductive grey/black
Electrical conductivity	Ω/cm	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>16</sup>	10 <sup>6</sup> – 10 <sup>9</sup>
FDA 21CFR 177.1380 (a)(4)		no	yes	no	yes
Hardness	Shore D	75	78	75	78
Heat conductivity at 40°C	W/(m×K)	0,151	0,157	0,160	0,157
Chemical resistance		as per list	as per list	as per list	as per list
Elongation at tear	%	280	265	265	265
Spec. weight	g/cm <sup>3</sup>	1,69	1,76	1,76	1,76
max. operating temperature	°C	150	150	150	150

### Quality control

All non-electrically conductive E-CTFE (**Halar®**) coatings are tested by us with 3000 Volt = all over for non-porosity. In addition, the layer thickness is tested with state-of-the-art layer thickness measuring devices.

The results of the tests are recorded in a detailed test report and submitted to the customer. This standardised process guarantees perfect quality that also meets maximum requirements.