

Sol-Gel-Nanocomposite coating

Surface modified SiO₂ particles type N(N) 9

Properties

- Hydrophilic surface
- Complete dissolving of water
- Minimal coating thickness
- Very high temperature stability

Physical properties

Water dissolving	very good
Contact angle to water	<10°
Contact angle to hexadecane	ns
Heat resistance	up to 290°C

Chemical resistance

Solvents	good
Organic acids and oils	good
Inorganic acids	partly
Inorganic bases	weak

Substrate materials

Stainless steel	yes
Aluminium	yes
Non-ferrous metals	yes
Glass	yes
Plastics	yes

Coating process

Coating thickness	1µm – 2 µm
Dipping process	yes
Spray application	yes
Sintering process	yes
Maximal thermal substrate stress	room temperature – 500°C

Fields of application

- Diagnostics: Hydrophilic surface coating of needles to reduce bubbles on the inner surface
- Industry / general: Creating hydrophilic surfaces for various applications

The information on the datasheet is based on data from our suppliers, feedback from customers and our research. The information is non-binding and for information purpose only. Specific, technical and chemical investigations are gladly carried out according to our customers' specifications.