



LABORATORY TEST:

The contact angle q was measured every 500 h within a period of 3500 h. A graphical representation of the result is shown in Figure 5. For the float glass materials, the results can be grouped into two levels. Based on a similar initial value for the contact angle q (from 104.1° to 110.6°), the coatings Competitor 1, Competitor 2 and Competitor 3 shows a clear decrease with increasing exposure time. For these coatings, a decrease of about 70 % compared to the initial value was typical. In contrast, the coating NANO-QuarzGC shows only a decrease of about 31 %. The level of the contact angle q for this coating is significantly higher than for the coatings Competitor 1, Competitor 2 and Competitor 3. The difference between the two levels is about 60 %.

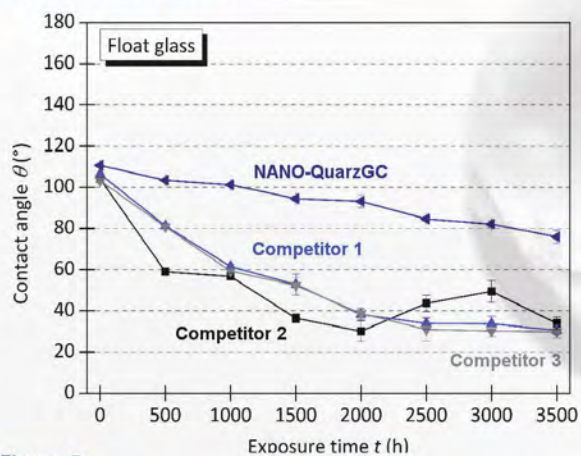


Figure 5: Representation of the contact angle q in dependence on exposure time t for the float glass.



Manufactured by Ceramic Nano-coatings
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NANO-coating for glass surfaces

NANO-QuarzGC™ - high quality NANO-coating for glass and glazed ceramic surfaces.



NANO-QuarzGC™ series nano-coatings

The new generation NANO-coating is designed to smooth glass or glazed ceramic surfaces to have less contact with grime particles. The hydrophobic and oleophobic effects of the coating cause particles of contamination such as grease, oil, water, mud and materials from environmental pollution to adhere less to the substrates, and allow them to be easily removed from the coating, i.e. without applying abrasive agents so called "Easy to Clean" effect.

EXAMPLES OF USE

Every type of glass and glazed ceramic surface

- » Automotive glass
- » Window glass & construction glass (conservatories, high-rise buildings etc)
- » Glazed ceramic surfaces (toilets, sinks, glazed tiles etc)
- » Glass surfaces in sanitary areas (showers, mirrors etc)
- » Solar panels

PRODUCT CHARACTERISTICS:

- » Strong hydrophobicity
- » Food safe (does not react with food)
- » Strong non-stick properties
- » Excellent easy-clean performance

OTHER PROPERTIES:

- » Invisible to the human eye (coating thickness: 100-150 nm)
- » Permanent (UV-stable, very resistant to abrasion)
- » Temperature resistant (up to 450°C)
- » Simple application (do-it-yourself)
- » Breathable
- » Chemical-resistant (up to pH value 13)

STORAGE STABILITY:

- » Unopened original containers can be stored for at least 2 years.
- » Recommended storage- and transport temperature: -3 to 30°C

CONSUMPTION:

- » Manual: 5-10 ml/m², Industrial: 10-15 ml/m²

APPLICATION:

- » Simple DIY application
 - » Manual - application with circular motion using a clean paper, linen or microfiber cloth.
 - » Industrial - available as polish-coat systems or spray-coating systems.
- The NANO-coating is completely fully cured after 24 hours.
The easy-clean effect can be tested after 24 hours.

ADVANTAGES OF NANO-COATINGS IN COMPARISON WITH COMPETITIVE PRODUCTS:

- » Permanence and longevity:
UV-stability enables functionality for a many years.
Many competitive products are damaged slowly by sunlight.
- » Abrasion-resistant easy-clean effect:
A permanent chemical bond with the substrate enables excellent abrasion resistance.
Many competitive products can be easily removed by abrasion.
- » Chemical stability:
The product is resistant to almost all standard household and industrial cleaners with the exception of concentrated lye.
Many competitive products must be reapplied after cleaning the surface.

