

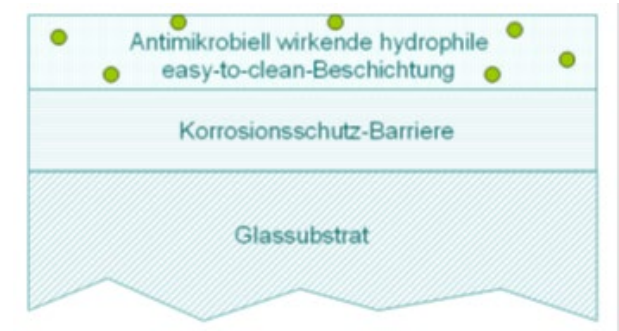
Multifunctional glass for sanitary areas

Transfer offering

The contact of glass with moisture and heat can hardly be avoided in sanitary areas. However, this stress can lead to glass corrosion, which is perceived as an irreversible clouding of the glass surface. In addition, further soiling is caused by soap residues and lime deposits during use. The agents used for cleaning can also damage the glass. A further problem, especially in the area of health care, is the high number of infections. This has become a serious problem, especially in hospital environments. The current state of the art is to use appropriate coatings to reduce build-up and prevent glass corrosion.

Approach

By use of an energy- and cost-efficient process combination of flame pyrolysis and sol-gel technology, corrosion-resistant, easy to clean and antibacterial coatings can be produced on glass.

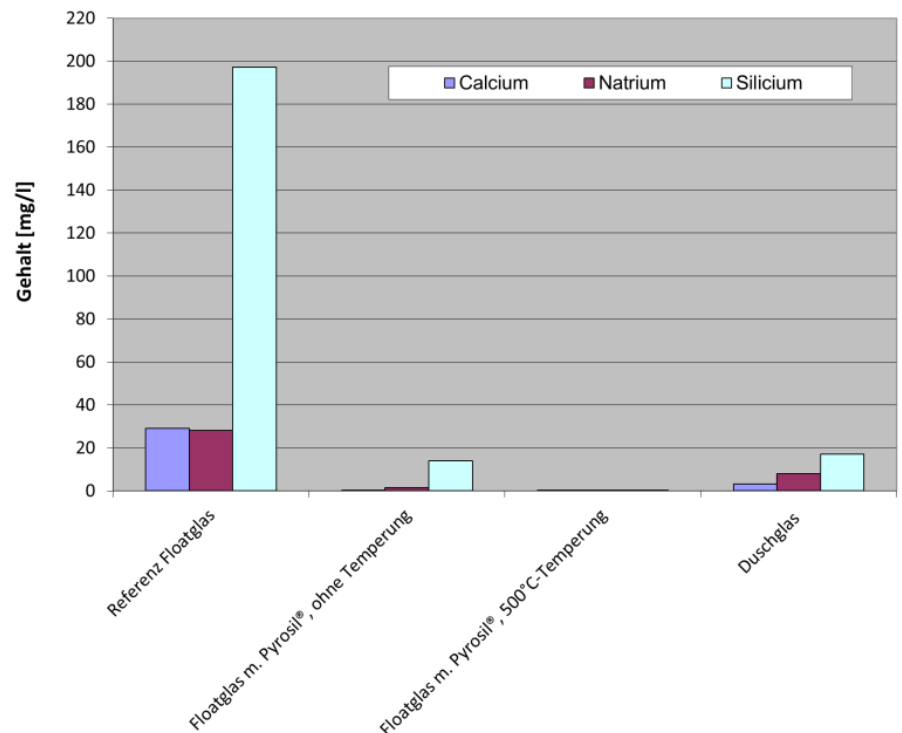


Structure of the combination layer

Advantages

- combination of anti-corrosive, easy-to-clean and antibacterial properties
- energy- and cost-efficient normal printing process
- improvement of the corrosion protection effect compared to the industrial product
- coupling with the process of thermal tempering of float glass possible

Eluat-Test: Löslichkeit Glasoberflächen in bidest. Wasser, 19 Stunden bei 95 °C



Development status and property rights

The topic presented was the subject of a publicly funded research project. In the future, the aim will be to ensure, in addition to the target properties, a long-term stability of the combination layer that is sufficient for wet areas.

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