FS004
C & C
EDITION

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Cracking in acrylic paints

FACTSHEET

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GLOBAL LEADER IN ADHESIVE TECHNOLOGIES
Bostik is one of the largest adhesive and sealant companies. Worldwide, we employ some 6,000 people in 50 countries across five continents. Our customers come from diverse markets, most notably the industrial manufacturing, construction and consumer sectors.

SMART INNOVATIONS
Our smart identity is underpinned by innovation. We pursue innovation vigorously, applying the latest technological advances to developing 'smart' adhesives. Our archives are laden with examples of Bostik technologies that have disrupted markets - from potato starch-based wallpaper paste to elastic attachment adhesive for diapers.

Today, our commitment to innovation is as strong as ever. We innovate with our customers through a global R&D network, comprising three international Smart Technology Centres and 8 regional centres. And we differentiate our business through this investment..

Cracking in acrylic paints

GENERAL INFORMATION
Acrylic sealants can be painted very well both with solvent based paints as well as water based paints (i.e.: acrylic latex). However, it is possible that the paint film on the acrylic joint can crack.

Painting the acrylic joint when still wet If acrylic joints are painted over when not yet dry, water must still evaporate from the joint. This will cause the joints to shrink and the paint film will be elongated and begin to crack. If the paint film is less elastic this problem will occur sooner.

DEFORMATION OF THE ACRYLIC JOINT
Sealants are used as they are flexible enough to absorb movement from adjacent walls. A hard, non-elastic paint applied to the sealant doesn't have this property and might show cracks through deformation of the joint. This risk is very low in interior joints as movement of these joints is mostly very limited.

SENSITIVITY OF PAINT CRACKING
The composition of the paint can will determine the paint cracking on acrylic joints. The composition of the paint is important to avoid cracking. This is mainly caused by highly filled emulsion based paints for interior use. Exterior and semi-gloss interior paints not as sensitive to paint cracking.

APPLICATION AT TOO LOW TEMPERARUTES OF THE SUBSTRATES
Emulsion based paints must be applied at a minimum temperature of + 7°C. If applied to colder substrates the paint can crack. When painting an interior glazing joint with an emulsion paint during winter, the temperature of the sealant could be very low due to direct contact with the cold, outside glass. So even if the interior temperature is high (above +7°C) the surface temperature of the sealant could be too low, resulting in cracking of the paint-film.

SOAP CONTAMINATION
After tooling the joint and before painting please remove any remaining soapy residue. This can interfere with correct film development during drying of the paint.

Sealants and fillers are applied to prepare joints, holes and window frames before overpainting. The right solution for each issue is the base for excellent painted results. In many cases sealants and paint are more or less compatible. However when overpainting sealants, painters face challenges and risks which are influencing the end result. Various technical problems can be prevented with the right products and preparation.

CRACKING OF PAINT

A typical painters problem is cracking of paint. Cracking is a distortion of the film and shows long cracked lines or a pattern of small cracks (mud cracking). Cracking is a problem in the finishing process and is not easy to solve afterwards, generating delay and additional costs. Paint cracking occurs in the curing process of paint on acrylic sealants. Cracking can be caused due to incompatibility between paint and sealant formulations and incorrect balance of binder in paint formulation. Prematurely overpainting causing dissolving the top layer of sealants. Bostik has researched cracking and the compatibility between paint and sealants and developed UCA-Technology. With UCA-Technology, Bostik meets the highest requirements in compatibility between paint and sealants.

Paint cracking

UCA®-TECHNOLOGY

UCA stands for Unique Compatibility Additives. The compatibility of sealants with paint is ensured by our unique and proven UCA® Technology. Bostik sealants and fillers with UCA® logo offer the best possible compatibility between sealants and paint due to specifically selected raw materials, specialized additives and dedicated R&D and testing facilities.

BOSTIK SEALANTS & FILLERS WITH THE UCA®

- Bostik A780 Crystal Clear Acrylic
- Bostik A790 Textured Finish
- Bostik A930 Easy Filler Pro
- Bostik A975 Premium Paintable
- Bostik A980 Instantly Paintable