

# Mowilith® Nano 9420

Acrylate/SiO<sub>2</sub> emulsion for the next generation of exterior coatings



## Typical Properties

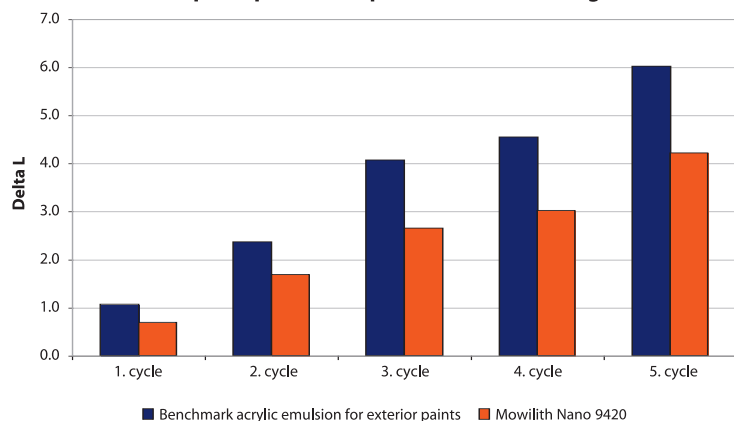
Chemical base	Pure acrylic/SiO <sub>2</sub>
Solids	45%
Tg	12°C
MFFT	7°C
SiO <sub>2</sub> content (on solid)	40%

## Combining the best of organic and inorganic technology

The next generation of exterior coatings is here – now – and it starts with Mowilith® Nano 9420. This emulsion actually creates a different structure on the paint surface, resulting in superior durability and performance.

Mowilith Nano 9420 is an emulsion built from an organic, pure acrylic polymer and an inorganic SiO<sub>2</sub>-phase. The two phases are chemically linked to ensure a homogeneous nano-scaled distribution of both phases throughout the entire film. Using this nano hybrid emulsion, it is possible to create a unique nano structure on the paint surface, which can be seen clearly in SEM pictures. This nano structure leads to an outstanding outdoor weathering behaviour with extremely low dirt pick up. At the same time, paints based on Mowilith Nano 9420 are able to achieve the highest quantity standards for water vapour permeability. Mowilith Nano 9420 also exhibits excellent fire-retardant properties.

Dirt pick up of facade paints (artificial soiling test)

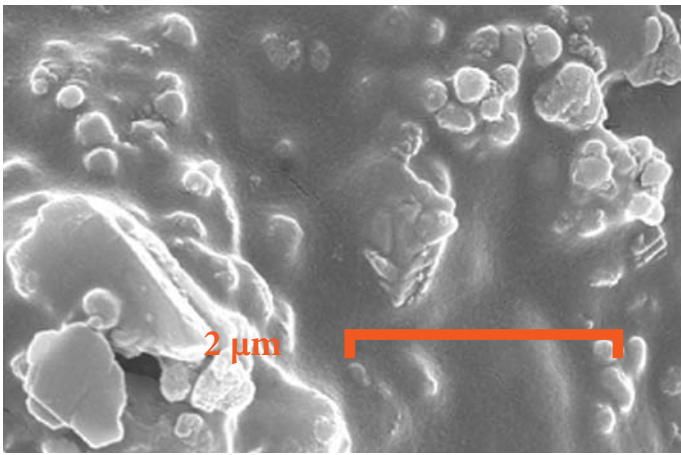


## Key features:

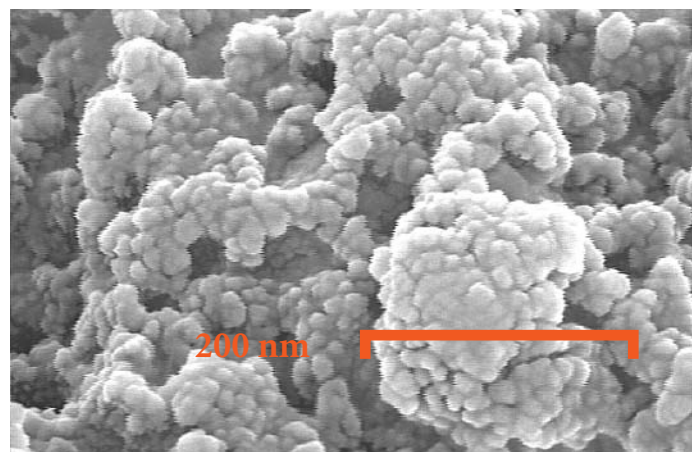
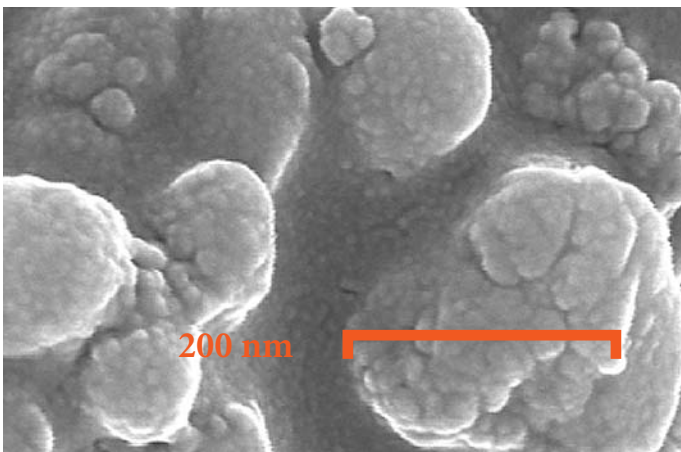
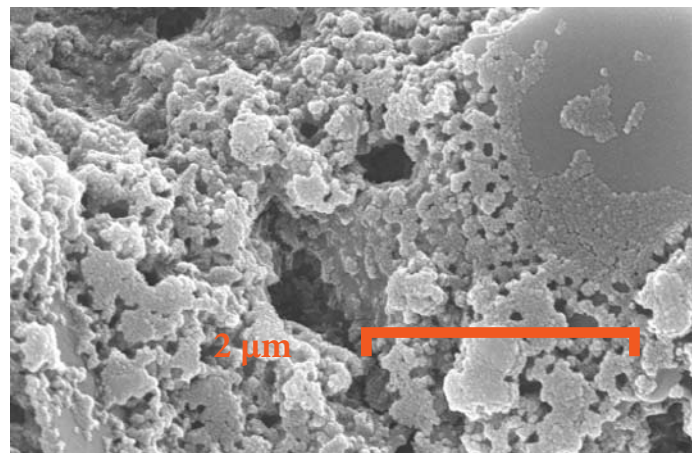
- ▶ Excellent outdoor durability
- ▶ High water vapour permeability
- ▶ Very low dirt pick up
- ▶ Creates a truly nano structured surface

*Your future is our focus...worldwide.*

Facade paint based on Acrylic benchmark



Facade paint based on Mowilith Nano 9420



As can be seen on the pictures on the right side, Mowilith Nano 9420 creates a distinct nano structure on the surface of the paint.

- On the 2 µm scale, the closed polymer film is replaced by an open structure leading to strongly increased water vapour permeability.
- On the 200 nm scale, silica structures at about 20 nm can be clearly identified.

We're investing in new facilities.  
We're developing new technology.  
We're committed to your future.

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