

## Solution Case Study

# Formulate Green Adhesives and Sealants with Broad Adhesion Performance in Difficult Conditions thanks to Dynasylan® 1146

### Aminosilane: Dynasylan® 1146

#### Key adhesives and sealants technologies

Adhesives and sealants based on:

- MS Polymer
- Silane modified polyurethane/polyether (SMP)
- RTV-1 / RTV-2 silicones
- Butyl rubber

#### Markets

Construction, parquet adhesives, transportation, do-it-yourself, industrial assembly

#### Key benefits

- Excellent adhesion performance to many substrates
- Reduced water uptake
- Good HSE and environmental profile

#### The challenge

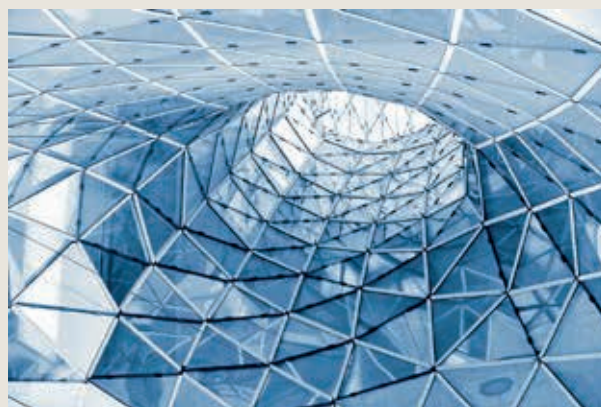
End users and the environment are key concerns for formulators when developing new adhesives and sealants. At the same time, maintaining the overall product performance level (adhesion, moisture resistance), even in harsh conditions, is a must.

#### The solution

With Dynasylan® 1146, formulators can develop adhesives and sealants with outstanding adhesion performance and an important water-repellent effect. It also allows formulating environmentally friendly and safe adhesives and sealants:

- Dynasylan® 1146 releases significantly reduced VOC amounts compared to traditional aminosilanes
- Dynasylan® 1146 is not skin-sensitizing

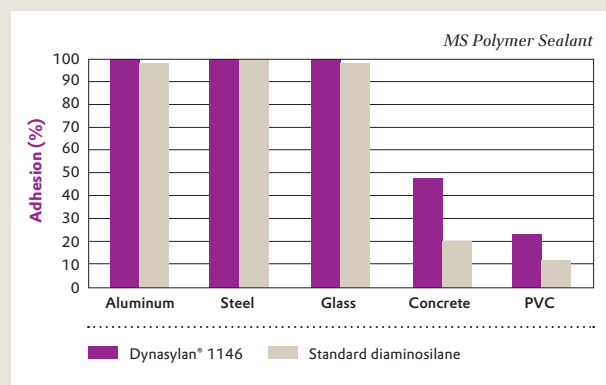
Dynasylan® 1146 is particularly suitable for construction, parquet applications and transportation.



### Enhanced adhesion performance

Dynasylan® 1146 exhibits very good adhesion performance withstanding difficult conditions such as exposure to moisture. It significantly improves adhesion to substrates especially when formulating innovative SMP (hybrid) systems or RTV silicones.

With Dynasylan® 1146, you can achieve excellent adhesion performance on a wide variety of substrates such as aluminum, steel, glass and wood; but even adhesion on critical concrete and PVC can be improved.

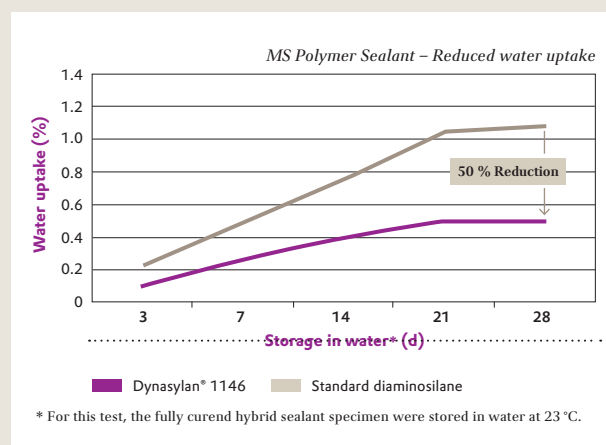


Adhesion performance of MS Polymer Sealant on various substrates

### Reduced water uptake

Dynasylan® 1146 prevents adhesives and sealants from deterioration as it helps to protect against moisture penetration or water absorption.

Sealants formulated with Dynasylan® 1146 enable to reduce water absorption by 50%.



Water uptake results

### Additional advantages provided by Dynasylan® 1146

- Less yellowing of white or transparent sealants compared to traditional aminosilanes
- Balance of important mechanical properties such as tensile and flexural strength to a high level

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