



## Dow Performance Silicones

# DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder



Waterproof cement-based building materials for added durability with less maintenance



Increase water repellency and reduce water penetration and absorption in all types of cement-based construction materials with DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder. This easily used admixture makes such materials more hydrophobic and resistant to the structural damage or appearance problems caused by excess moisture and sunlight (UV) degradation.

### Easy to Use in a Range of Applications

Supplied as free-flowing granules, which are easily mixed dry or readily dispersed in water, DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder:

- Can be easily blended into material formulations during manufacturing or used as an admixture at the job site.
- Adds hydrophobic properties to both exterior and interior cement-based materials, including concrete, cement, joint fillers, stucco, EIFS, plaster, grout, mortar, and more.
- Delivers longer-term performance than stearate-based powders.
- Provides better dispersion than silicone specialties.

### Active Silicone in a Dry Delivery System

Developed to offer the waterproofing performance of liquid silicone in a dry delivery system, DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder consists of white granules that have three components: a powder carrier, an encapsulant, and a finely dispersed active silicone ingredient. The encapsulant enhances storage stability of the powder and, when water is added, releases the active silicone that makes cement-based construction materials hydrophobic upon curing.



DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder in granule form can be mixed dry or dispersed in water.

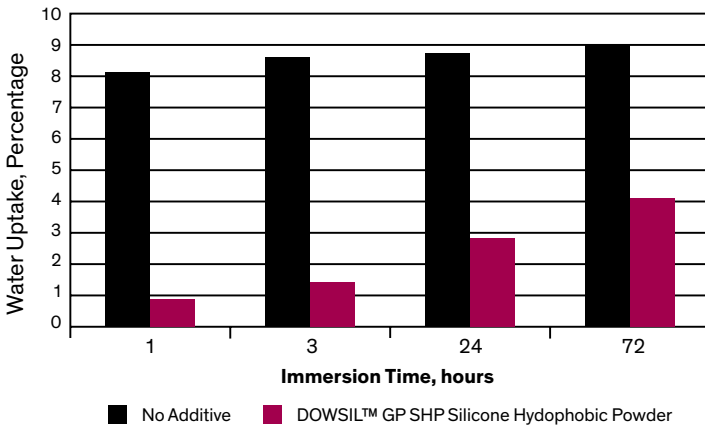
DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder adds hydrophobic properties to cement-based materials including concrete, stucco, plaster, grout, and mortar.

- Mixes easily for economically making materials hydrophobic
- Increases water repellency with no post-treatment required
- Reduces water penetration via surface and capillary action
- Decreases water absorption, even in direct contact up to 24 hours

## Versatile and Effective at Low Levels

For formulating specific cement-based materials or for use as an admixture on the job site, DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder is effective at very low levels. Typically, 0.2 to 1.5 percent by weight of the material mixture is needed, and levels up to 2.5 percent have little impact on compression strength. Testing levels for optimum hydrophobic properties and water levels for application consistency is recommended.

## Water Uptake Over Time<sup>1</sup>



<sup>1</sup>Formulation containing 2.21 percent DOWSIL™ GP SHP Silicone Hydrophobic Powder added to 73.34 percent sand and 24.4 percent cement versus a control mixture without the additive

## Typical Properties

Property	Unit	Value
Appearance		White Granules
Particle Distribution <500 Micron	%	100
Mean Particle Size	µm	300
Bulk Density	g/L	600

Specification Writers: Please contact your local Dow Sales Application Engineer or Dow Customer Service before writing specifications on this product.

## Learn More

For expert advice on how to use DOWSIL™ GP SHP 50 Silicone Hydrophobic Powder or for information about other construction and building protection materials from Dow, visit [consumer.dow.com/construction](http://consumer.dow.com/construction).

## Contact Us

Dow has sales offices, manufacturing sites and science and technology laboratories around the globe. Find local contact information at [consumer.dow.com/contactus](http://consumer.dow.com/contactus).

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