



## Technical Data Sheet

### **DOWSIL™ BY 16-606 Water Repellent**

100% active additive for autoclaved fiber-reinforced panels, autoclaved lightweight cement (ALC) panels, fiber-reinforced cement (FRC) boards and other prefabricated building components such as ceramic and calcium silicate siding boards

#### **Features & Benefits**

- Reduces water absorption by up to 90%
- Typically used as supplied – no predilution required
- Excellent performance at low additive levels (typically used at < 1% of weight of panel)
- Suitable for alkaline and neutral substrates
- Chemically bonds to substrates
- Penetrates deeply into substrates
- UV for long-life protection
- Does not change appearance of substrates at recommended solids levels
- Performs well on all types of common porous building substrates
- Increases life of substrates by preventing water entry
- Performs well at low concentrations

#### **Composition**

- Solvent-free silane/siloxane blend
- Clear liquid

#### **Applications**

- As an admixture-type additive for neutral and alkaline factory-manufactured boards and panels to reduce water uptake of the panels and impart water repellency to the surface, in applications where room-temperature cure is required

#### **Typical Properties**

Specification Writers: These values are not intended for use in preparing specifications.

Property	Unit	Result
Color		Straw-colored, clear liquid
Active ingredient	percent	100
Specific gravity at 25°C (77°F)		0.96
Flash point, closed cup	°C (°F)	160 (320)
Viscosity	cSt	20
Refractive index		1.42

**Description**

DOWSIL™ BY 16-606 Water Repellent admixture additive is a solvent-free, alkyl-modified, low viscosity silicone fluid. Upon addition of the diluted product to cement-based boards and panels, it will disperse within the matrix. When the board cures, DOWSIL™ BY 16-606 Water Repellent will provide long-term water repellency and water exclusion properties. Unlike other admixtures for factory-manufactured cement-based boards and panels, post-treatment at elevated temperatures is not required to achieve maximum performance.

**How to Use**

DOWSIL™ BY 16-606 Water Repellent should be used as supplied. Do not dilute in solvents prior to use. Depending on final requirements, DOWSIL™ BY 16-606 Water Repellent can be used at levels ranging from 0.1 to 3%. Prior testing and evaluation are required to ensure optimum addition level. The board will achieve full water repellent properties when the boards are fully dried and cured.

**Handling  
Precautions**

DOWSIL™ BY 16-606 Water Repellent evolves small quantities of ethanol as a byproduct of the curing process. Use adequate safety precautions at all times. Exposure to water may cause the material to cure in the container. Containers should be immediately sealed after use and care taken to ensure contamination of unused material by moisture or alkaline materials such as lime and cement does not occur.

Use safety precautions at all times. Do not store near sparks or open flames. Do not smoke in the vicinity of the application. Use this material in a well-ventilated area away from sparks and open flames. Always wear protective goggles and gloves.

If inhaled, move immediately to fresh air. In case of skin or eye contact, flush immediately with water for 15 minutes. Remove contaminated clothing and shoes and call a physician. Follow local, state and federal regulations for proper disposal.

PRODUCT SAFETY INFORMATION REQUIRED FOR SAFE USE IS NOT INCLUDED IN THIS DOCUMENT. BEFORE HANDLING, READ PRODUCT AND SAFETY DATA SHEETS AND CONTAINER LABELS FOR SAFE USE, PHYSICAL AND HEALTH HAZARD INFORMATION. THE SAFETY DATA SHEET IS AVAILABLE ON THE DOW WEBSITE AT CONSUMER.DOW.COM, OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

**Usable Life and  
Storage**

Product should be stored at or below 35°C (95°F) in original, unopened containers.

Keep away from heat and open flame.

**Limitations**

Do not use on applications under continuous hydrostatic pressure.

Do not use when temperature is at or below 4°C (39°F) or in direct sunlight when temperatures exceed 35°C (95°F).

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## **Health And Environmental Information**

To support customers in their product safety needs, Dow has an extensive Product Stewardship organization and a team of product safety and regulatory compliance specialists available in each area.

For further information, please see our website, [consumer.dow.com](http://consumer.dow.com) or consult your local Dow representative.

[consumer.dow.com](http://consumer.dow.com)

### **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY**

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that our products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent.

Dow's sole warranty is that our products will meet the sales specifications in effect at the time of shipment.

Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

**TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, DOW SPECIFICALLY DISCLAIMS ANY OTHER EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY.**

**DOW DISCLAIMS LIABILITY FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES.**

