



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 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, dow.com, or consult your local Dow representative.

Disposal Considerations

Dispose in accordance with all local, state (provincial) and federal regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local, state (provincial) and federal regulations. Contact your Dow Technical Representative for more information.

Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products — from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

dow.com

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