



## Technical Data Sheet

### DOWSIL™ 6696 Emulsion

Emulsion used for impregnation of wood.

#### Features & Benefits

- Low-VOC emulsion
- Easily dilutable in water
- Can be applied by vacuum impregnation or by surface treatment (brushing / rolling / dipping).
- Can be applied diluted in water or further formulated in water-based formulations.
- Wood impregnated with DOWSIL™ 6696 Emulsion are more resistant against capillary absorption of water.
- Treatment of wood with DOWSIL 6696 Emulsion (when formulated and applied properly):
  - should not decrease rate of drying of wet wood
  - should not modify the appearance of wood

#### Composition

- Cationic emulsion of a functional PDMS

#### Applications

- DOWSIL 6696 emulsion is designed to be used as water repellent for wood.

#### Typical Properties

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

Property	Unit	Result
Color		Milky-white
Physical form		Water-thin liquid
Silicone content	% w/w	30
Viscosity at 25°C (77°F)	mm <sup>2</sup> /s	10–20
Emulsifier type		Cationic
pH		~5.5–8

#### Description

DOWSIL 6696 Emulsion is a 30% cationic emulsion of a functional polydimethylsiloxane polymer. Impregnation of wood surfaces with DOWSIL 6696 Emulsion reduces their capillary water absorption.

## How To Use

DOWSIL 6696 Emulsion can be diluted in water. In that case water should be added to the emulsion with low shear mixing. Deionized water is recommended for dilution. To prevent mold growth within the package, additional preservative may be required.

In formulation aimed at being applied by vacuum impregnation, DOWSIL 6696 Emulsion can be diluted such as to reach active content as low as 1%.

In formulation aimed at being applied by brushing/rolling/dipping, DOWSIL 6696 Emulsion can be diluted such as to reach active content ranging between 5 and 10%. The diluted formulation has to be applied until surface saturation.

Impact of impregnation of wood with formulations based on DOWSIL 6696 Emulsion can be dependent on the specific wood species used.

Before treatment a test application is recommended in order to ensure the compatibility and determine the suitable amount of product to be applied on wood substrate.

Substrates should be free of standing water, surface dirt, dust, oils, and other contaminants. Dry surfaces are preferred to ensure correct penetration into the wood substrate.

Preliminary trials should be carried out to properly assess application conditions (application method, quantity of formulation to use) and impact on treated wood (reduction of capillary water absorption, color).

## Handling Precautions

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 [WWW.CONSUMER.DOW.COM](http://WWW.CONSUMER.DOW.COM), OR FROM YOUR DOW SALES APPLICATION ENGINEER, OR DISTRIBUTOR, OR BY CALLING DOW CUSTOMER SERVICE.

## Usable Life And Storage

When stored between 5°C (41°F) and 35°C (95°F) in the original unopened containers, this product has a usable life of 360 days from the date of production.

This product is susceptible to microbial contamination. Please use appropriate storage and handling procedures to prevent contamination.

## Packaging Information

This product is available in 18 kg pails and 180 kg drums, net weight.

## Limitations

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, [www.consumer.dow.com](http://www.consumer.dow.com) or consult your local Dow representative.

<http://www.consumer.dow.com>

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