# Product Information Water Repellent Emulsion

# **Dow Corning® IE-6692 Emulsion**

#### **FEATURES**

- Dow Corning<sup>®</sup>IE-6692 Emulsion is a water based silane emulsion which can be used as admixture in cementitious materials.
- Silanes react chemically within the cementitious matrix and provide integral water repellent treatment
- Treated cement-based materials are resistant against water absorption throughout the material.
- As a water based emulsion, *Dow Corning* IE-6692 Emulsion provides easy incorporation of silanes in cement-based slurry.
- Dow Corning IE-6692 Emulsion can be used as supplied or diluted in water prior to addition in cement slurry.

#### **BENEFITS**

- When used as an additive to cementitious matrix, silane emulsion can impart the following benefit to the final material:
  - Significant reduction in capillary absorption of water.
  - Little to no reduction of water vapor permeability.
  - Significant reduction of ingress and transfer of watersoluble salts through the matrix (i.e. efflorescence).
  - Reduction of water uptake is resistant to UV exposure.

#### **COMPOSITION**

- Water dilutable emulsified silane.
- 52.5 weight % of active ingredient.
- Active ingredients contain alkoxysilane.

Integral water repellent for cement-based construction materials

#### **APPLICATIONS**

 Admixture for cement-based construction materials with improved water resistance (e.g.pavers)

#### TYPICAL PROPERTIES

Specification Writers: These values are not intended for use in preparing specifications. Please contact your local Dow Corning sales office or your Global Dow Corning Connection before writing specifications on this product.

Test*	Property	Unit	Result
0176	Color		Milky White
0862	Active Content	%	52.5
0007	pН		5-9
0001	Density	g/ml	0.95
	Solvent (Thinner)	· ·	Water

\*CTM: Corporate Test Method, copies of CTMs are available on request.

#### DESCRIPTION

Dow Corning IE-6692 Emulsion is a 52.5% active non ionic emulsion containing alkoxysilanes. Silanes are well known for their ability to provide hydrophobicity and decrease dramatically the water ingress of cementitious materials. Silane supplied in emulsion can chemically react with cement hydrate during cement cure. Alcohol is released upon reaction of the silanes.

#### **HOW TO USE**

It is advised to stir *Dow Corning* IE-6692 Emulsion prior to its application.

Dow Corning IE-6692 Emulsion can be used as supplied or can be diluted in water before use. The water should be added to the emulsion with low shear mixing. Deionized water is recommended for dilution. After dilution, it is advised to make sure the pH is maintained in the 5-9 range. To prevent mold growth within the package, additional preservative may be required if the diluted emulsion is expected to be stored.

Dow Corning IE-6692 Emulsion can be used as an admixture to cementitious mixtures at levels between 0.1 to 0.2% by weight of Dow Corning IE-6692 Emulsion as supplied based on the dry composition weight.

If calculated to cement mass, an addition level of *Dow Corning* IE-6692 Emulsion between 0.4 and 0.8% vs cement is advised.

Tested as integral water repellent in EN 196-1 mortar, addition of 0.2% *Dow Corning* IE-6692 Emulsion was shown to have limited impact on mechanical properties. It is however strongly advised to carry out an evaluation of *Dow Corning* IE-6692 Emulsion addition on the physical properties of the targeted cement-based materials prior to any use in full scale application.

#### TECHNICAL SERVICES

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### HANDLING PRECAUTIONS

PRODUCT SAFETY
INFORMATION REQUIRED
FOR SAFE USE IS NOT
INCLUDED IN THIS
DOCUMENT. BEFORE
HANDLING, READ PRODUCT
AND MATERIAL SAFETY
DATA SHEETS AND
CONTAINER LABELS FOR
SAFE USE, PHYSICAL, AND
HEALTH HAZARD
INFORMATION. THE
MATERIAL SAFETY DATA

SHEET IS AVAILABLE ON THE DOW CORNING WEBSITE AT DOWCORNING.COM, OR FROM YOUR DOW CORNING REPRESENTATIVE, OR DISTRIBUTOR, OR BY CALLING YOUR GLOBAL DOW CORNING CONNECTION

# USABLE LIFE AND STORAGE

Dow Corning IE-6692 Emulsion should be stored under dry conditions out of direct sunlight below 40°C (104°F) in the original unopened containers. This product has a usable life of 9 months from the date of production.

Protect from freezing.

## PACKAGING INFORMATION

This product is available in 200kg drums and 1,000 kg containers.

#### LIMITATIONS

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

Water uptake of cement-based material under constant hydrostatic pressure cannot be reduced by use of Dow Corning IE-6692.

## HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Product Safety and Regulatory Compliance (PS&RC) specialists available in each area.

For further information, please see our Web site, dowcorning.com or consult your local Dow Corning representative.

## LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY

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