

# HYDROPHOBE® Cement Additive Data Sheet

Second generation additives for masonry cement

## Product Description

The HYDROPHOBE® series of additives are multi-purpose, second generation additives to be interground during the manufacture of prepared masonry cement, to entrain air, impart water repellency, control setting time, extend board life and improve workability.

HYDROPHOBE® eliminates the need to add separate materials to impart this combination of properties to masonry cements.

## Properties

HYDROPHOBE® additives are emulsions of aliphatic and aromatic carboxylic acids, hydrocarbons, high molecular weight polyalcohols and complex carbohydrates.

Product specifications for the most widely used Hydrophobe® formulations are as follows:

- Appearance: Cream colored emulsion
- Specific Gravity: 0.99 - 1.06
- pH: 7.0 - 8.0
- Viscosity Range (21 °C): 100 - 800 cps

## Product Advantages

- Imparts superior water repellency and workability
- Extended board life
- Single material addition
- Tailor-made formulations
- Economical use cost

## Typical Application

The HYDROPHOBE® product line includes many tailor-made formulations designed for the economical production of high quality masonry cements and mortars as described under ASTM C 91 and ASTM C 270.

HYDROPHOBE®31 series should be used for air contents of the mortar at 17% - 21% and HYDROPHOBE®41 for air contents of 15% - 19%.

## Handling

HYDROPHOBE® should be added to the gypsum, limestone or cool clinker feed as received. HYDROPHOBE® may be diluted with water on a one-to-one basis only if adequate agitation is provided.

Suitable dispensing pumps with adjustable flow rates should be used for consistent performance of the additive.

## Addition Rates

The dosage rate of HYDROPHOBE® will depend on the type of masonry cement and the performance requirements. Typical addition rates will vary between 0.10% and 0.30% by weight of cement. The optimum dosage rate of HYDROPHOBE® must be determined during laboratory and full scale mill tests.

## Dosing Equipment

GCP cement additives should be accurately dispensed through a calibrated dosing system, suitable for the cement mill and output required.

## Specification Compliance

HYDROPHOBE® additives are formulated for production of masonry cement and mortars meeting the physical requirements of ASTM C 91 and ASTM C 270 specifications.

## Packaging

HYDROPHOBE® is supplied in 210 L (55 gal) drums, or in bulk by tanker trucks. It contains no flammable materials.

## Storage

Protect from freezing.

Drummed HYDROPHOBE® that has been stored for some time should be mixed well prior to proportioning.

Care should be taken to ensure that dust does not enter the storage tanks as it can cause emulsified HYDROPHOBE® formulations to deteriorate.

## Technical Services

Field Engineers from GCP are available to assist in laboratory and mill test evaluations of HYDROPHOBE®.

gcpat.com | North America Customer Service: +1 (877) 423 6491

We hope the information here will be helpful. It is based on data and knowledge considered to be true and accurate, and is offered for consideration, investigation and verification by the user, but we do not warrant the results to be obtained. Please read all statements, recommendations, and suggestions in conjunction with our conditions of sale, which apply to all goods supplied by us. No statement, recommendation, or suggestion is intended for any use that would infringe any patent, copyright, or other third party right.

HYDROPHOBE is a trademark, which may be registered in the United States and/or other countries, of GCP Applied Technologies Inc. This trademark list has been compiled using available published information as of the publication date and may not accurately reflect current trademark ownership or status.

© Copyright 2018 GCP Applied Technologies Inc. All rights reserved.

GCP Applied Technologies Inc., 2325 Lakeview Parkway, Suite 475, Alpharetta, GA 30009, USA

GCP Canada, Inc., 294 Clements Road, West, Ajax, Ontario, Canada L1S 3C6

This document is only current as of the last updated date stated below and is valid only for use in the United States. It is important that you always refer to the currently available information at the URL below to provide the most current product information at the time of use. Additional literature such as Contractor Manuals, Technical Bulletins, Detail Drawings and detailing recommendations and other relevant documents are also available on [www.gcpat.com](http://www.gcpat.com). Information found on other websites must not be relied upon, as they may not be up-to-date or applicable to the conditions in your location and we do not accept any responsibility for their content. If there are any conflicts or if you need more information, please contact GCP Customer Service.

Last Updated: 2024-06-21

[gcpat.com/solutions/products/gcp-functional-additives/hydrophobe-cement-additive-data-sheet](http://gcpat.com/solutions/products/gcp-functional-additives/hydrophobe-cement-additive-data-sheet)