

MasterPolyheed® 3840

Workability-Retaining Admixture

DESCRIPTION

MasterPolyheed® 3840 admixture is a revolutionary new technology based on significant advances in admixture chemistry.

MasterPolyheed® 3840 admixture is used as part of an admixture system to provide customized admixture solutions for a wide range of concrete applications.

MasterPolyheed® 3840 admixture is a workability-retaining admixture that provides flexible degrees of slump retention without retardation.

MasterPolyheed® 3840 admixture provides the concrete producer with the ability to immediately create the optimal admixture system for changing and fluctuating regional raw materials, environmental conditions and project requirements.

MasterPolyheed® 3840 admixture gives the concrete producer the ability to consistently produce and deliver quality concrete mixtures.

MasterPolyheed® 3840 admixture meets the interim requirements of ASTM C 494/C 494M Type S, Specific Performance, admixtures.

FIELDS OF APPLICATION

MasterPolyheed® 3840 is recommended for use in:

- Concrete with varying slump requirements
- Concrete mixes utilizing supplementary cementitious materials
- Concrete where high flowability, increased stability and durability are needed
- Ready-mix and pre-cast concrete Production of self-consolidating concrete in (SCC) mixtures.

FEATURES

- Workability retention without retardation
- Flexible levels of workability retention by adjusting dosage
- Improved early- and late-age compressive strengths

BENEFITS

MasterPolyheed® 3840 offers the following benefits:

- Promotes greater consistency of concrete workability at the jobsite
- Promotes consistency in compressive strengths via minimized jobsite addition of water
- Minimizes re-dosing of high-range water-reducing admixture at the job site
- Consistent air-entrainment
- Fewer rejected loads and better customer satisfaction due to consistent quality of concrete
- Faster truck turn-around time
- Expanded concrete delivery range

GUIDELINES FOR USE

Dosage: **MasterPolyheed® 3840** admixture has a recommended dosage range of 3-12 fl oz/cwt (195- 750 mL/100 kg) of cementitious materials.

Mixing: **MasterPolyheed® 3840** admixture can be added with the initial batch water or as a delayed addition.

PRODUCT NOTES

Corrosivity – Non-Chloride, Non-Corrosive:

MasterPolyheed® 3840 admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, pre-stressing steel or of galvanized steel floor and roof systems.

Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of

MasterPolyheed 3840

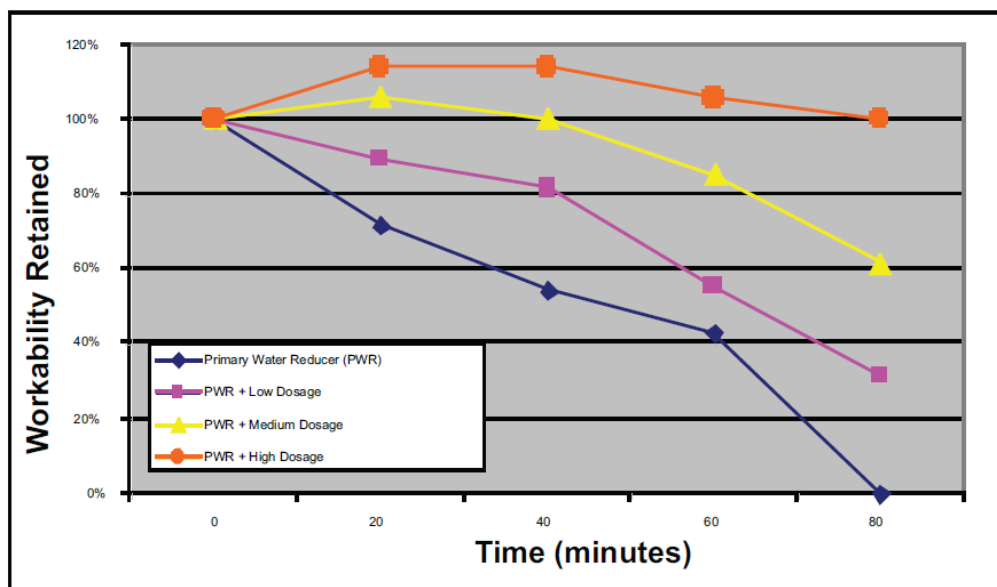
Compatibility: **MasterPolyheed® 3840** admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid-range and high-range water-reducing admixtures, air-entrainers, accelerators, retarders, extended set control admixtures, corrosion inhibitors, and shrinkage reducers

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PERFORMANCE CHARACTERISTICS

The data in the following graph represents the dramatic performance achievable through the use **MasterPolyheed® 3840** admixture. Represented in the graph are four mixtures. The first mixture utilized a primary water reducer without **MasterPolyheed® 3840** admixture. The three

remaining mixtures utilized the same primary water reducer with a low, medium and high dosage of the **MasterPolyheed® 3840** admixture. These mixtures had concrete temperatures of 90 F (32 C) and contained 600 lb/yd³ (356 kg/m³) of cement with a w/c of 0.40.



Do not use **MasterPolyheed® 3840** admixture with admixtures containing beta-naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced. **MasterPolyheed® 3840** admixture has only been tested with admixtures manufactured by BASF Construction Chemicals. As a result, use of **MasterPolyheed® 3840** admixture with non-BASF admixtures may produce unpredictable results. BASF denies any warranty expressed or implied with respect to any application using a non-BASF admixture in connection with the use of **MasterPolyheed® 3840** admixture.

STORAGE AND HANDLING

STORAGE TEMPERATURE:

Storage Temperature:

MasterPolyheed® 3840 admixture must be stored at temperatures above 40 °F (5 °C). If **MasterPolyheed® 3840** admixture freezes, thaw and reconstitute by mechanical agitation. **Do not use pressurized air for agitation.**

Shelf Life: **MasterPolyheed® 3840** admixture has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated.



We create chemistry

MasterPolyheed® 3840

PACKAGING

MasterPolyheed® 3840 admixture is available in 20L & 1000 litre IBCs or in bulk.

TYPICAL PROPERTIES*

Appearance	Brownish Liquid
Specific gravity @ 25°C	1,050 - 1,070
pH-value	5,0 - 7,0

ADDITIONAL INFORMATION

For additional information on **MasterPolyheed® 3840** admixture or on its use in developing concrete mixtures with special performance characteristics, contact your local sales representative

QUALITY AND RESPONSIBLE CARE

All products originating from BASF Construction Chemicals South Africa are manufactured under a management system independently certified to conform to the requirements of the quality (ISO 9001), environmental and occupational health & safety standards.

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this BASF publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF, are responsible for carrying out procedures appropriate to a specific application.

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