

MasterEase 7000

Low Viscosity Concrete Concept

New superplasticizer technology imparts advanced rheological properties delivering a significant decrease in the viscosity of concretes and extended rheology maintenance.

DESCRIPTION AND WHERE TO USE

MasterEase 7000 is a superplasticizer, high range water reducer from recent research work of R & D laboratories of BASF's Master Builders Solutions.

MasterEase 7000 is especially engineered for ready-mix Rheoplastic concrete having fluid consistence and self-compacting concrete, **to impart exceptional rheological properties and having a very high workability retention, in all weather conditions. It improves considerably the placing and finishing of concretes and enhances the ease of concrete pumping for all construction activities.**

MasterEase 7000 is chloride free, meets UNI EN 934-2, UNI EN 480 (1-2), UNI 10765, ASTM C 494 requirements for Type F and it is also compatible with all cements meeting the EN 197 and ASTM C 150 standards.

INNOVATION

MasterEase 7000 is based on an innovative polymer chemistry and it is patented by BASF.

Its action differs from traditional superplasticizers, to the extent that the adsorption of polymers of MasterEase 7000 on binder particles is provided by a flexible chemical bond which does not impede the flow of concretes.

This innovation significantly improves rheological behaviour of concretes treated by MasterEase 7000, they have a low yield stress, low viscosity with additional feature of long workability retention.

LOW VISCOSITY CONCRETE

Low Viscosity Concrete is an innovative concept dedicated to the viscosity (rheology) of concretes. It is based on the use of MasterEase polymer with dedicated technical services of BASF's Master Builders Solutions.

This concept not only allows the achievement of a significant reduction in concrete viscosity but also optimizing the performance of concrete.

BENEFITS FOR READY-MIX PRODUCER

MasterEase 7000 is recommended for the production of standard and self-compacting concrete requiring low viscosity, long workability retention and high compressive strength. MasterEase 7000 is specially formulated for the concrete industry. It is also suitable for applications in the general Civil and building sites.

It can be used for the realization and achievement of the following:

- Concrete complying to EN 206-1 / CN
- Ready-mix and Site Mix concretes
- Superior Concrete pumping
- Reduction of Concrete waste
- Ease of compacting and finishing concrete
- High performance and ultra-high strength concrete
- Concrete for low environmental impact and high in mineral additions
- Architectural concrete

PROPERTIES

The MasterEase 7000 delivers many advantages both in the fresh concrete on hardened concrete.

At fresh state, optimizing the rheology:

Decrease in the viscosity of concretes at constant W/C

- Improved pumping (lower pressure and longer distance)
- Better response to vibration
- Greater Ease of Pumping
- Superior finishing, floating and smoothing operations
- Excellent flexibility, mobility and flow of self-compacting concrete.

Reduction possible to the W/C ratio without affecting the viscosity of concretes.

- New windows for technical and economic optimization of concrete mix designs (addition and types of binder, choice of aggregates)
- High strength and resistance to segregation
- Workability retention over 60-90 minutes without retardation
- Good compatibility with all types of cement and mineral additions.

MasterEase 7000

Low Viscosity Concrete Concept

New superplasticizer technology imparts advanced rheological properties delivering a significant decrease in the viscosity of concretes and extended rheology maintenance.

In the cured state, improvement of sustainability

- i. excellent early and late compressive strength
- ii. Improvement of quality of surface finishes
- iii. As part of a reduction of W/C
 - Increased mechanical resistances
 - Decreased porosity and permeability
 - Decreased shrinkage and cracking
 - Enhanced durability

COMPATIBILITY

In order to optimise some special properties of the concrete, use of the following complementary admixtures is suggested:

- demoulding agent from **MasterFinish** line for good surface appearance. curing agent
- curing agent **MasterKure** for sealing the surface of freshly finished concrete against rapid evaporation of water which may cause plastic shrinkage cracking.

MasterEase 7000 is not compatible with all admixtures of MasterRheobuild series.

DIRECTIONS FOR USE

MasterEase 7000 is a liquid admixture to be added to the concrete during the mixing process:

- mix cement and secondary binders, sand, coarse aggregates and the mix water until a stiff, yet homogeneous, mixture is obtained;
- optimal mixing water reduction is obtained if MasterEase 7000 is mixed into the concrete right after the addition of the initial 80-90% of the total water;
- avoid adding the admixture to the dry aggregates;
- add MasterEase 7000 admixture and mix again for to 60 seconds in order to disperse it homogeneously;
- continue mixing until required workability is obtained, with addition of the remaining water.

Technical Information

Form	Liquid
Relative density (g/cc at 20°C)	1.030 – 1.060

DOSAGE

The recommended dosage rate range is 0.6 to 1.2 litres per 100 kg of binder. Other dosages may be recommended in special cases according to specific job site conditions.

In such cases please consult our Technical Service Department for advice.

PACKAGING AND STORAGE

MasterEase 7000 is available in 10L cans, 1.000L tanks or in bulk. MasterEase 7000 must be stored in a place where the temperature does not drop below 5 °C.

In case of freezing, warm up and homogenise the admixture solution before using.

From 16/12/1992 BASF Construction Chemicals Italia Spa operates under the Quality System in compliance with European Standard UNI-EN ISO 9001. The environmental management system of BASF Construction Chemicals Italia Spa is certified accordingly to UNI EN ISO 14001 and the System of Safety Management is certified accordingly to OHSAS 18001. Environment sustainability: Partner Green Building Council since 2009.

BASF Construction Chemicals Italia Spa

Via Vicinale delle Corti, 21 – 31100 Treviso – Italy

T +39 0422 429200 F +39 0422 421802

<http://www.master-builders-solutions.basf.it> e-mail: infomac@basf.com

For further information, please consult your local BASF Construction Chemicals Italia Spa representative.

The technical advice on how to use our products, either written or verbally given, are based on the present state of our best scientific and practical knowledge, and no guarantee and/or implicit or explicit responsibility are assumed on final results of works executed by the use of our products.

The owner, his representative, or the contractor is responsible for checking the suitability of our products as to the intended use and aims.

Supersedes all prior issues on this product.

August 2019

