

MasterEase[®] 3054

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

The **MasterEase 3054** is a superplasticizer, high range water reducer from recent research work of R & D laboratories of BASF's Master Builders Solutions. The **MasterEase 3054** is designed to impart exceptional rheological properties to fresh concrete. : It improves considerably the placing and finishing of concretes and enhances the ease of concrete pumping for all construction activities.

The **MasterEase 3054** is free of chloride and has been formulated to comply with the requirements of ASTM C 494 for Type F and G admixtures. It is compatible with all cements meeting recognised international standards.

INNOVATION

The **MasterEase 3054** 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 3054** 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 3054**, 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.

FEATURES AND BENEFITS

The **MasterEase 3054** is recommended for the production of concrete requiring low viscosity, long workability retention and high compressive strength.

The **MasterEase 3054** 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-mixed and Site Mix concretes
- Superior Concrete pumping
- Reduction of Concrete waste
- Ease of compacting and finishing concrete
- Concrete for low environmental impact and high in mineral additions
- Architectural concrete

PROPERTIES

The **MasterEase 3054** 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

- Improvement of the implementation of concretes
 - Improved pumping (lower pressure and longer distance)
 - Better response to vibration
 - Greater Ease of Pumping
 - Superior finishing, floating and smoothing operations

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 120 minutes without retardation.
- Good compatibility with all types of cement and mineral additions.

In the cured state, improvement of sustainability

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



We create chemistry

MasterEase[®] 3054

APPLICATION

The optimal effect is generally achieved by dosing **MasterEase 3054** in the concrete mix after addition 70% of water in the mixer. However, it is possible to dose **MasterEase 3054** on aggregates directly.

DOSAGE

Recommended range: 800ml to 2000ml per 100kg cementitious.

For other uses, please contact your local BASF representative.

To use in synergy and combination with another Master Builders Solutions' product range, please consult your local BASF representative.

PACKAGING

The **MasterEase 3054** is available in 205 drum and bulk delivery.

SHELF LIFE

MasterEase 3054 has a 12 month shelf life from date of manufacture. It is recommended to stock it in temperature above +5°C.

PRECAUTIONS

Health: MasterEase 3054 does not contain any hazardous substances requiring labelling.

It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc.

For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions on the product Material Safety Data Sheet.

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VN#MasterEase_3054 asean v1-0216

STATEMENT OF RESPONSIBILITY

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