

MasterEase[®] 3977

Poly Aryl Ether based superplasticizer for the production of high quality ready-mix concrete

DESCRIPTION

MasterEase 3977 is an innovative latest generation superplasticizer based on Poly Aryl Ether (PAE) polymers and is specially engineered for ready-mix concrete.

MasterEase 3977 is formulated from unique polymers produced in-house by Master Builders Solutions. The objective of the development of the PAE polymer was to take the characteristics of traditional polycarboxylic ether (PCE) admixtures but to modify the structure of the polymer to give enhanced rheology and robustness to the concrete.

The PAE polymers contained in the formulation of **MasterEase 3977** ensure that enhanced rheology is maintained from time of mixing to time of placing and finishing.

FIELDS OF APPLICATION

MasterEase 3977 is used for the production of high-quality ready-mix concrete

FEATURES AND BENEFITS

The ready-mix producer:

- Capability of delivering high performance concrete with enhanced rheology
- Concrete is easier to pump reducing pumping time and wear-and-tear on equipment.
- Concrete is easier to place and finish
- Enhanced rheology is maintained from time of mixing to time of placement.

The contractor / applicator:

- Easier placing and faster strength development
- Improved concrete surfaces

The engineer:

- Insurance that concrete meets original specification
- High quality durable concrete

PACKAGING

MasterEase 3977 is supplied in 210 litre drums, 1,000 litre containers or in bulk

TYPICAL PROPERTIES*

Appearance	Brown coloured liquid
Specific gravity @ 25°C	1.070
pH value	5.0 – 7.0
Chloride content	"chloride-free" to EN 934-2

STANDARDS

ASTM C-494 Type F&G
 BS EN 934-2

APPLICATION PROCEDURE

Dosage

The normally recommended dosage rate of **MasterEase 3977** is 0.8 to 2.5 litre per 100kg of total cementitious material.

Other dosages may be recommended in special cases according to the specific site conditions. In this case please consult our Technical Services Department for advice.

Mixing

MasterEase 3977 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if **MasterEase 3977** is poured into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

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COMPATIBILITY

MasterEase 3977 is not compatible with **MasterRheobuild** superplasticizers due to the PAE and VMA polymers contained in its formulation.

MasterEase 3977 is suitable for mixes containing:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- GGBS (ground granulated blast furnace slag)

STORAGE

MasterEase 3977 should be stored in closed containers or storage tanks to protect from evaporation. The shelf life is 1 year when stored as above.

HANDLING AND TRANSPORTATION

No special requirements must be observed during use. Protection gloves and glasses are however recommended. **MasterEase 3977** is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

SAFETY PRECAUTIONS

MasterEase 3977 contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

* Properties listed are based on laboratory controlled tests.

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