

MC-PowerFlow 3977

New generation of superplasticizer for prestressed concrete.

PRODUCT PROPERTIES:

- Excellent water reduction ability.
- Slump retention and flowability very good at low slump.
- Increase setting time ability, high early and ultimate strength.
- Promote faster early strength development and reduce curing time for concrete.
- Free of corrosive components.

AREAS OF APPLICATION:

- Self-compacting concrete, high flow concrete.
- Pre-cast concrete, prestressed concrete requires high early strength.
- Spun pile concrete.
- High grade concrete, durable concrete.
- Thin structure, dense steel.
- Prestressed beam, floor.
- Complicated detail requires high strength.

APPLICATION NOTES:

- **MC-PowerFlow 3977** is a new generation of concrete admixture based on modified polymer technology with superior high range water reducing to enhance the early and ultimate strength.
- Faster evolution of early strength development.
- Can reduce the time of steam curing process for getting early strength.
- **MC-PowerFlow 3977** with special elements that disperse and separate the cement particles causing increased flowability for self compacting concrete without affecting early strengths.
- It can be added directly to the gauging water prior to its addition to the dry mixed aggregates or simultaneously with the gauging water at the batching plant.
- Trial mixes are recommended to establish exact dosage rates required to suit individual requirements. Significant overdosage will result in increased setting time of the concrete. However, provided concrete is cured effectively, ultimate strength and properties will not be affected.
- We can provide accurate dispensing equipment upon request.
- Use an appropriate mixer and do not mix by hand. If assistance is required, please contact our Technical Service Department.
- Can be combined with all MC-BIFI products but must be mixed separately.
- Can be used with all standard cement types as well as sulfate resistant cement.
- Does not contain any hazardous substances. It is safe to use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc.
- Avoid contact with foodstuffs and utensils. Avoid prolonged skin contact. In case of contamination, it should be thoroughly rinsed with water. When splashed into eyes or mouth, wash thoroughly with clean water and obtain medical attention immediately.

TECHNICAL DATA:

Characteristic	Unit	Value	Comments
Density	g/cm ³	1.08 ± 0.05	
Recommended dosage	Litre	0.6 – 1.6	per 100 kg of binder
Typical dosage	Litre	0.6 – 1.2	per 100 kg of binder
Max. Chloride content	%	per weight < 0.1	

PRODUCT CHARACTERISTICS:

Standard	Complies with ASTM C494 & TCVN 8826 Type F
Consistency	Liquid
Expiry	8 months
Form of delivery	200 L drums 1000 L IBC tanks Tank trucks

Property specifications are based on laboratory tests and may vary in practical application. To determine the individual technical suitability, preliminary suitability tests should be carried out under the application conditions.

Color: Admixture's color can be changed due to the reaction between polymer component within admixture's composition with UV from sunlight. This phenomenon does not affect to admixture's quality in its shelf-life. We recommend users to store product into covered area to protect from direct sunlight in order to avoid mentioned changing.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition **11/23**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.