

PRODUCT DATA SHEET

Sika® ViscoCrete® Duo MZ-1

Combined Superplasticiser / Viscosity Modifying Admixture for Precast Concrete Production

PRODUCT DESCRIPTION

Sika® ViscoCrete® Duo MZ-1 is a liquid high performance superplasticiser and viscosity modifying admixture providing improved rheology and robustness to high workability concretes. Sika® ViscoCrete® Duo MZ-1 is based on polycarboxylate polymers.

USES

- Sika® ViscoCrete® Duo MZ-1 is a unique product that is suitable for the production of precast concrete
- High performance concrete
- Self-compacting concrete
- Concrete requiring high early strength

CHARACTERISTICS / ADVANTAGES

- High-range water reductions resulting in higher strengths and densities
- Improved cohesion properties in highly fluid concrete or SCC
- Improved durability
- Improved early and ultimate strengths
- Optimal rheology properties for SCC production
- Reduced segregation and bleeding
- Reduced drying shrinkage
- Improved consistence retention
- Improved surface finish

APPROVALS / STANDARDS

Conforms to the requirements of BS EN 934-2 Tables 3.1 & 3.2
 DoP 88808048, certified by Factory Production Control Body 1029 and provided with the CE mark
 DoC 53439669, certified by Factory Production Control Body 0120 and provided with the UKCA mark

PRODUCT INFORMATION

Chemical Base	Modified polycarboxylate
Packaging	20 litre drum, 1000 litre IBC
Appearance / Colour	Clear / straw coloured liquid
Shelf Life	12 months from date of production if stored properly in undamaged containers.
Storage Conditions	Dry conditions at temperatures between +5°C and +25°C. Protect from direct sunlight and frost (freezing point +1°C).
Density	1.06 kg/l (at +20°C)
pH-Value	5.0 +/- 1.0
Total Chloride Ion Content	<0.10% w/w (chloride free)
Equivalent Sodium Oxide	<0.40% w/w (alkali content)

TECHNICAL INFORMATION

Specific Advice

Air Entrainment: Negligible, normally minimal increase
Effect on Setting: Minimal effect
Effect of Overdosing: Increased workability and segregation

APPLICATION INFORMATION

Recommended Dosage

0.5 – 1.5% by weight of cement

Compatibility

Sika® ViscoCrete® Duo MZ-1 may be combined with many other Sika products.
Important: Always conduct trials before combining products in specific mixes and contact our Technical Service Department for information and advice about any specific combinations.

Dispensing

Sika® ViscoCrete® Duo MZ-1 is added to the gauging water or added with it into the concrete mixer.
To take advantage of the high water reduction, a wet mixing time, which is depending on the mixing conditions and mixer performance, of at least 60 seconds is recommended.
When added on site the truck mixer shall rotate its drums at maximum revolutions for at least 1 minute per m3 concrete and a minimum of 5 minutes to achieve a uniform mix.

Restrictions

When using Sika® ViscoCrete® Duo MZ-1 a suitable mix design has to be taken into account and local material sources shall be trialed.
Sika® ViscoCrete® Duo MZ-1 shall not be added to dry cement.
Excessive water addition or overdosing may cause bleeding or segregation.
Support from our Technical Service Department is recommended

VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

ECOLOGY, HEALTH AND SAFETY

REGULATION (EC) NO 1907/2006 - REACH

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recom-

mendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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