

PRODUCT DATA SHEET

SikaPlast® RB 6860

(formerly MasterRheobuild® 6860)

High range water reducing, set retarding, superplasticiser for high performance concrete mixes

DESCRIPTION

SikaPlast® RB 6860 is composed of synthetic polymers specially designed to allow considerable reduction of mixing water while maintaining control on extend of set retardation.

SikaPlast® RB 6860 is preferred admixture for triple blend binder system based high performance concrete (HPC) mixes or mixes containing micro silica or metakaolin.

SikaPlast® RB 6860 is chloride free.

USES

- Concrete containing Silica fume/ Metakaolin
- Ready mixed concrete
- Congested/complex reinforced sections
- Pre-cast concrete production
- Long-distance transporting
- Pumped concrete
- Low water/binder ratio mixes
- Mixes requiring >20% water reductions

PRODUCT INFORMATION

| | |
|----------------------------|--|
| Packaging | 275 kg drum |
| Shelf life | 12 months from date of production |
| Storage conditions | SikaPlast® RB 6860 must be stored where temperatures do not drop below +5°C. If product has frozen, thaw at +5°C or above and completely reconstitute using mild mechanical agitation. Do not use pressurized air for agitation. Store under cover, out of direct sunlight and protect from extremes of temperature. |
| Appearance / Colour | Dark brown liquid |
| Density | 1.18 ± 0.02 at 25°C |
| pH-value | ≥ 6 |

APPLICATION INFORMATION

CHARACTERISTICS / ADVANTAGES

- Good dispersion even in mixes with high fines
- Reduced thermal peaks
- High workability for longer periods
- Lower pumping pressure
- Resistance to segregation even at high workability
- Extended setting with longer workability
- Reduced water content for a given workability
- Higher ultimate strengths
- Reduced permeability
- Improved durability
- Reduced shrinkage and creep
- Increased ease in finishing concrete

APPROVALS / STANDARDS

IS 9103, ASTM C494 Type G

Recommended Dosage

Optimum dosage of SikaPlast® RB 6860 should be determined with trial mixes. As a guide, a dosage range of 500ml to 800ml per 100kg of cementitious material is recommended as a starting point. In high performance concrete, a dosage up to 1500ml per 100kg of cementitious material can be added subject to prior site trials. Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of the recommended range may be required. In such cases, contact your local Sika representative.

Dispensing

SikaPlast® RB 6860 is a ready-to-use liquid which is dispensed into the concrete together with the mixing water. The plasticising effect and water reduction are higher if the admixture is added to the damp concrete after 50 to 70% of the mixing water has been added. The addition of SikaPlast® RB 6860 to dry aggregate or cement is not recommended.

Compatibility

SikaPlast® RB 6860 is compatible with most admixtures used in the production of quality concrete including normal, other mid-range and high-range water-reducing admixtures, air entrainers, accelerators, retarders, extended set-control admixtures, corrosion inhibitors, and shrinkage reducers. SikaPlast® RB 6860 is also compatible with slag and pozzolans such as fly ash and silica fume.

BASIS OF PRODUCT DATA

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

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for exact product data and uses.

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 recommendations, 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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