MasterLife[®] SRA 50

Expanding plasticising admixture for cementitious grout and concrete

DESCRIPTION

MasterLife SRA 50 is an expansion system which compensates for plastic shrinkage and settlement in cementitious grouts and concrete. Supplied in powder form, MasterLife SRA 50 produces controlled expansion and maintains high water retention. It contains a water-reducing agent which increases the workability of the mix with a reduced water content. Full expansion is achieved before initial setting occurs resulting in a high degree of interfacial contact.

FIELDS OF APPLICATIONS

Recommended for use in:

- Ready-mixed or precast concrete structures requiring shrinkage and long term durability
- Wet mix shotcrete
- · Mortars and grouts

FEATURES AND BENEFITS

- A cement plasticising and water reducing agent to improve the free flowing properties of the grout at low water/cement ratios.
- An expanding agent that increases the volume of the grout or concrete which in turn eliminates shrinkage and settlement.
- A catalyst to control the rate of expansion and to ensure full expansion of the grout or concrete.

(For <u>precision</u> grouting and load bearing operations use **MasterFlow** grouts.)

PACKAGING

MasterLife SRA 50 is available in 15kg bags.

TYPICAL PROPERITIES*

| Chloride content: | Nil to BS 5075 : 1982 | |
|-------------------|-----------------------|--|
| Nitrate content: | Nil | |
| Freezing point: | n/a | |
| Flash point: | None | |
| Dosage: | 500gm/100kg cement | |

EXPANDING PROPERTIES

The expansion obtained by the use of **MasterLife SRA 50** reaches a maximum within 1-2½ hours of mixing under average temperature conditions. After this period no settlement occurs, and the grout retains its maximum expansion. **MasterLife SRA 50** produces a maximum expansion of 3.25% in a neat cement grout, and 2% expansion in a 1:1 sand/cement grout.

PLASTICISING PROPERTIES

MasterLife SRA 50 imparts fluidity to grout and concrete, even at reduced water/cement ratios, and because of the water reducing action, higher compressive strengths are obtained.

Table 1: Compressive strength (N/mm²) after 7 days

| | Neat cement | Sand/cement |
|-------------------|-------------|-------------|
| | grout | grout 1:1 |
| Control | 27.0 | 21.8 |
| MasterLife SRA 50 | 29.2 | 24.3 |

DIRECTIONS FOR USE FOR GROUTS

First add the water to the mixer and then the Portland cement, mix thoroughly until the cement has been completely dispersed. Then add the **MasterLife SRA 50** and sand (if any is being used), and continue mixing a further 2 minutes or until complete dispersion of the **MasterLife SRA 50** is achieved.

The type of mixing equipment generally used in preparing cement grouts is that which will produce a high local turbulence thus ensuring an efficient breakdown and dispersion of the cement.



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DOSAGE

MasterLife SRA 50 is used at the rate of 500gm per 100kg cement, and can be used either with ordinary Portland cement or Rapid Hardening Portland cement.

SPECIFICATION CLAUSE

The **MasterLife SRA 50** shall be added at the rate of 500gm per 100kg Portland cement and used strictly in accordance with the manufacturer's recommendations.

SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with the eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

STORAGE

Store out of direct sunlight, clear of the ground on pallets protected from rainfall. Avoid excessive compaction. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult MBCC's Technical Services Department. Shelf life is 6 months when stored as above.

NOTE

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

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

QUALITY AND CARE

All products originating from MBCC's Dubai, UAE facility are manufactured under a management sy stem independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001, ISO 14001 and OHSAS 18001.

REQUEST AND REFER TO RECOMMENDED INSTALLATION PROCEDURES FOR **MasterFlow** GROUTS PRIOR TO USE

* Properties listed are based on laboratory controlled tests.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this MBCC publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by MBCC either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not MBCC, are responsible for carrying out procedures appropriate to a specific application.



