

# MasterLife<sup>®</sup> 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.

### TYPICAL APPLICATIONS

Recommended for use in:

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

### ADVANTAGES

- 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 precision grouting and load bearing operations use **MasterFlow** grouts.)

### PACKAGING

**MasterLife SRA 50** is available in 15kg bags.

### TYPICAL PROPERTIES\*

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/mm<sup>2</sup>) after 7 days

	Neat cement grout	Sand/cement grout 1:1
Control	27.0	21.8
<b>MasterLife SRA 50</b>	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.

# MasterLife<sup>®</sup> SRA 50

## 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.

## STORAGE AND SHELF LIFE

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 Master Builders Solutions Technical Services Department. Shelf life is 6 months when stored as above.

## HEALTH AND SAFETY

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.

## QUALITY AND CARE

All products originating from Master Builders Solutions Dubai, UAE facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001 and ISO 14001.

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

\* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC Group in many countries.

MBS\_CC-UAE/Life\_SRA50\_01\_95/v3/11\_14

### STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions 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 Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

**Master Builders Solutions**  
**Construction Chemicals LLC**  
 P.O. Box 37127, Dubai, UAE  
 Tel: +971 4 8090800  
[www.master-builders-solutions.com/en-ae](http://www.master-builders-solutions.com/en-ae)

**Disclaimer:** the TUV mark relates to certified management system and not to the product mentioned on this datasheet



A brand of  
**MBCC GROUP**