

# MasterLife AS 21

## High performance shrinkage reducing agent

### DESCRIPTION

**MasterLife AS21** is a ready to use liquid admixture formulated to significantly reduce the drying shrinkage of any concrete.

### RECOMMENDED USES

**MasterLife AS21** is recommended for all types of concrete where a reduction in drying shrinkage is required. Examples include:

- Slab-on-ground concrete
- Concrete structures subject to marine and/or chemical environments
- Industrial pavements
- Pre-stressed elements
- Tunnellinings
- Bridge girders
- Watertight and water retaining structures
- Concrete pipes
- Manufactured concrete products

### FEATURES AND BENEFITS

Pore water capillary tension is the major contributor to the drying shrinkage of concrete.

**MasterLife AS21** reduces the drying shrinkage of concrete by reducing the capillary tension of the pore water in concrete. Reductions in drying shrinkage of up to 50% have been obtained using **MasterLife AS21**.

The benefits derived from the reduction in drying shrinkage include:

- Dramatic reduction in crack occurrence caused by drying shrinkage
- Increased joint spacing in concrete pavements and slab-on-ground
- Improved concrete durability
- Longer service life

### APPLICATION

#### Mixing

**MasterLife AS21** can be added during the batching process or on site. It is recommended that when added during the batching process, **MasterLife AS21** is added to the initial batch water (as per a normal water reducer) to ensure complete distribution throughout the mix. When added on site, high speed agitation for 2 to 3 minutes is required to ensure complete distribution of the **MasterLife AS21** throughout the mix.

The recommended dose rate of **MasterLife AS21** is 2 to 8 litres per cubic metre.

#### Mix Adjustment

The **MasterLife AS21** dosage must be considered as part of the unit water content of the mix design. A reduction of 2 to 8 litres per cubic metre of water is therefore recommended when batching the concrete.

### COMPATIBILITY

**MasterLife AS21** can be used with other Master Builders Solutions admixtures to achieve cost effective customised performance. However, all admixtures should be dispensed separately and added separately to initial batching water to ensure complete distribution throughout the mix. **MasterLife AS21** should not be used in conjunction with other admixtures unless specific test information is available.

### PACKAGING

**MasterLife AS21** is supplied in 1000 litre palletcons and bulk delivery.

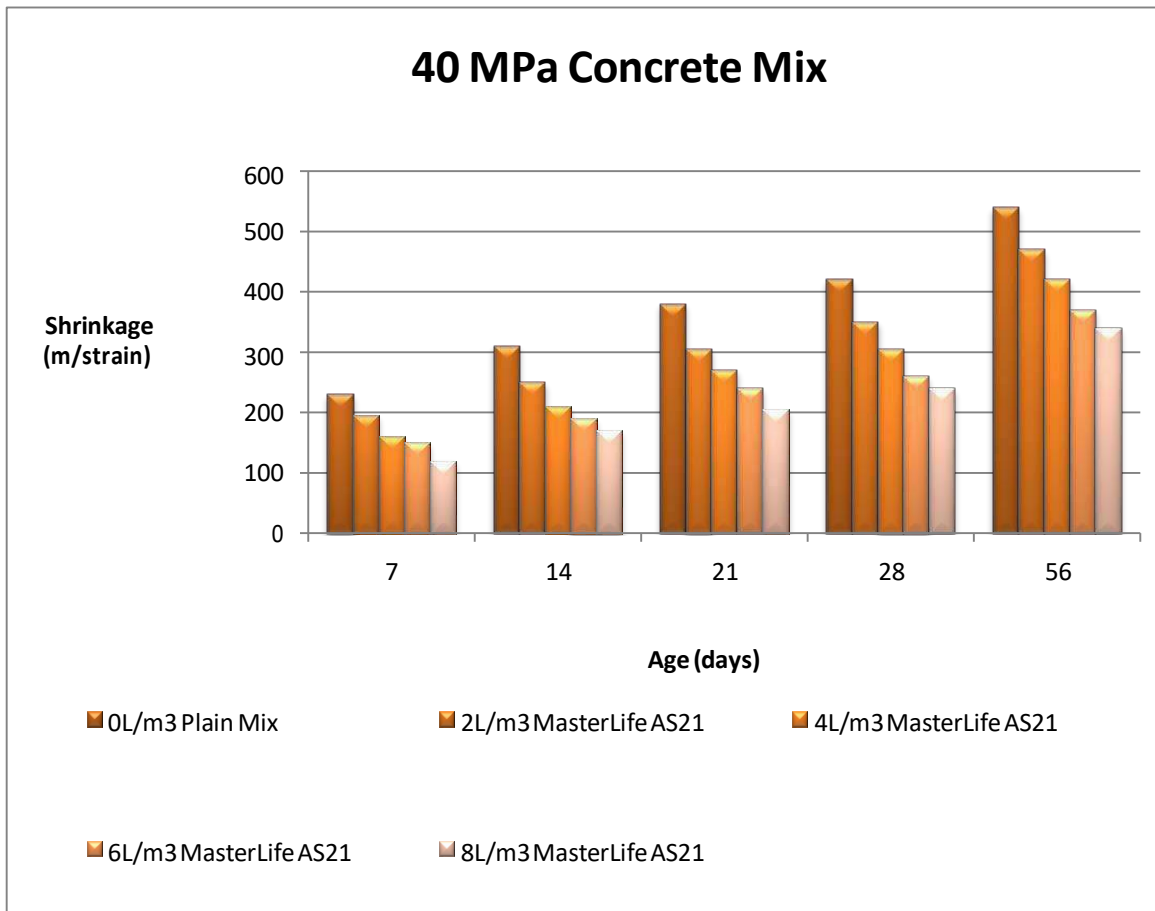
### STORAGE/SHELF LIFE

**MasterLife AS21** should be stored out of direct sunlight. If kept in a dry place in tightly closed original packing it has a 12 month shelf life.

### PRECAUTIONS

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the Master Builders Solutions Material Safety Data Sheet (MSDS) from our office or our website.

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**STATEMENT OF RESPONSIBILITY**

The technical information and application advice given in this Master Builders Solutions publication is 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 commonwealth or State legislation. The owner, his representative or the contractor 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 verbally 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.

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