

# MasterRheobuild® 3090

High range, water-reducing superplasticiser for concretes containing GGBS and microsilica

## DESCRIPTION OF PRODUCT

**MasterRheobuild 3090** is formulated from synthetic polymers specially designed to impart rheoplastic qualities to concrete, particularly those containing GGBS and microsilica.

A rheoplastic concrete is a fluid concrete with a slump of at least 200mm, easily flowing, but at the same time free from segregation and having the same w/c ratio as that of a low slump concrete (25mm) without admixture.

**MasterRheobuild 3090** is chloride-free.

## ADVANTAGES

**MasterRheobuild 3090** considerably improves the properties of fresh and hardened concrete.

## PRIMARY USES

- Mixes containing GGBS or microsilica
- Mass concrete pours
- Ready-mixed concrete
- Pumped concrete
- Casting in hot climates

## TO OBTAIN

- High workability for longer periods
- Lower pumping pressure
- Delayed setting with longer workability
- Higher ultimate strengths
- Reduced permeability
- Improved durability

## COMPATIBILITY

**MasterRheobuild 3090** has been specifically developed for use in concretes modified with ground granulated, blast furnace slag, but is compatible with all cement types.

## PACKAGING

**MasterRheobuild** is available in 1000ltr bulk

## TYPICAL PROPERTIES

Colour:	Dark Brown liquid
Specific gravity:	1.200 -1.230 at 25°C
Chloride content:	Nil to BS 5075 Part 1
Freezing point:	0°C
Flashpoint:	N/A
pH:	6-11

## STANDARDS

ASTM C-494 Type A, B, D, F and G

## DOSAGE

Optimum dosage of **MasterRheobuild 3090** should be determined in trial mixes. As a guide, the following dosages are recommended as a starting point for any trial: in normal concrete, a dosage of between 0.8% and 2%; in high performance low w/c ratio concrete, a dosage of between 1.5 and 3%. Dependent upon mix requirement, it is possible to use a higher dosage of **MasterRheobuild 3090** without causing any adverse effects upon the concrete. Please consult Master Builders Solutions 's Technical Services Department for further information.

## DISPENSING

**MasterRheobuild 3090** is a ready-to-use liquid, which is dispensed into the concrete together with mixing water. The plasticising effect and water reduction are higher if the admixture is added to the concrete after 50-70% of the mixing water has been added. The addition of **MasterRheobuild 3090** to dry aggregate or cement is not recommended. Automatic dispensers are available.

## WORKABILITY

**MasterRheobuild 3090** ensures that rheoplastic concrete remains workable in excess of 3 hours at +20°C.

Workability loss is dependent on temperature, on the type of cement, the nature of aggregates, the method of transport and initial workability. It is strongly recommended that concrete should be properly cured particularly in hot and dry climates.

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## STORAGE

**MasterRheobuild 3090** must be stored where temperatures do not drop below +5°C. If product has frozen, thaw and agitate until completely reconstituted. Store under cover, out of direct sunlight and protect from extremes of temperature.

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 's Technical Services Department.

## SHELF LIFE

Up to 24 months if stored according to manufacturer's instructions in unopened containers.

## SAFETY PRECAUTIONS

**MasterRheobuild 3090** is not a fire or health hazard. Spillages should be washed down immediately with cold water. For further information, refer to the material safety data sheet.

## NOTE

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

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

## QUALITY STATEMENT

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

\* Properties listed are based on laboratory controlled tests.

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