

MasterCast 864

Water inducer & finishing aid for Manufactured Concrete Products

Material Description

MasterCast 864 is a water inducing admixture for use in the production of Manufactured Concrete Products (MCP). It is an aqueous polymer dispersion and permits the addition of additional mixing water without the final product showing signs of slumping or sagging. The benefits of including extra water in the production of MCP can be an improved hydration efficiency of cement and/or an improved surface finish on the final product.

In addition, when a concrete batch is produced with aggregates that have a high moisture content, it can sometimes be difficult to control the total water content of the concrete batch by traditional methods, such as decreasing any added mixing water because of the water already present in the aggregates. In this scenario, the use of MasterCast 864 permits this excess water to be managed so that production can continue without the usual detrimental effects of excess water.

A primary benefit of using MasterCast 864 in the production of MCP is the improved hydration efficiency of cement, whereby a final product can achieve higher strength development. The additional water would normally cause slumping and sagging in the final product, however when using MasterCast 864, this undesired deformation can be avoided.

Areas of Application

MasterCast 864 is suitable for Manufacturing Concrete Products, especially:

- Blocks
- Concrete block paving
- Hollowcore slabs
- Pipes

Characteristics and Benefits

MasterCast 864 offers the following benefits for the MCP industry to:

- Improving Higher quality surface finish.

- Increased tolerance to excessive aggregate moisture content.
- Increased tolerance to aggregate moisture content variation.
- Improved homogeneity of materials throughout the final product

Application Procedure

MasterCast 864 is a liquid ready-to-use admixture to be added to the concrete during the mixing process. The best results are obtained when the admixture is added once the aggregates, cement and 50% of the mixing water are dispensed. The final water content is adjusted to obtain the desired mix moisture content.

Dosage

The normally recommended dosage rate of MasterCast 864 is:

- *By Volume* - 0.1 to 0.50 litres per 100 kg of cementitious powder content.
- *By Weight* - 0.105 to 0.525 kg per 100 kg of cementitious powder content.

The dosage rates given above are for typical usages, they are not meant as absolute limits, as other dosages may be utilised in special cases according to specific job conditions. If required consult our Technical Services Department for advice. Trial mixes should be carried out to ensure optimum dosage and effect.

Compatibility

MasterCast 864 can be used with all types of EN 197 Cements. For use with other special cements, contact our Technical Services Department.

MasterCast 864 should always be used in it's own dedicated system from storage tank, to dispenser, to discharge into the mixer. Any potential contamination can cause line build up & ultimately blockages. The pH of MasterCast 864 also requires that all equipment that it is in contact with it, is suitable for use



MasterCast 864

Water inducer & finishing aid for Manufactured Concrete Products

with liquids having a pH of less than 3.0. This includes all lines & dispensing pumps.

MasterCast 864 should not be pre-mixed with other admixtures.

When complimentary admixtures are required it is important that trials are performed, prior to any supply, to determine the respective dosages of any complimentary admixture, and the suitability in the fresh, and hardened states, of the resultant concrete. In these circumstances we recommend that you consult our Technical Services Department for further advice.

MasterCast 864 is compatible and recommended for use with:

- MasterPel 793 hydrophobic agent.

Packaging

MasterCast 864 is supplied in 1000-litre IBC's and 15-litre containers.

Contact Details

Master Builders Solutions UK Ltd
Swinton Hall Road,
Swinton,
Manchester,
M27 4EU

Tel: +44 (0) 161 727 6300

www.master-builders-solutions.com/en-gb

Product Data	
Appearance:	White liquid
Solids Content	25.0 ± 1.0%
Specific gravity @ 20°C:	1.05 ± 0.02
pH-value:	3.0 ± 1.0
Logistics	
Shelf life:	6 months if stored according to manufacturer's instructions in unopened container.
Storage conditions:	Store in original sealed containers and at temperatures between 5°C and 30°C. 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.
Handling, transportation & disposal:	Refer to MasterCast 864 Safety Data Sheet

MasterCast 864

Water inducer & finishing aid for Manufactured Concrete Products

Disclaimer

MasterCast 864, Master Builders Solutions UK Ltd, Version 4

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Spillage

Chemical products can cause damage; clean spillage immediately.

DISCLAIMER

"Master Builders Solutions UK Ltd" (the Company) endeavours to ensure that advice and information given in Product Data Sheets, Method Statements and Material Safety Data Sheets (all known as Product Literature) is accurate and correct. However, the Company has no control over the selection of its products for particular applications. It is important that any prospective customer, user or specifier, satisfies him/her-self that the product is suitable for the specific application. In this process, due regard should be taken of the nature and composition of the background/base and the ambient conditions both at the time of laying/applying/installing the material and when the completed work is to be brought into use.

Accordingly, no liability will be accepted by the Company for the selection, by others, of a product, which is inappropriate to a particular application.

Products are sold subject to the Company's standard conditions of sale and all customers, users and specifiers, should ensure that they examine the Company's latest Product Literature.