

MasterMatrix[®] UW 480

Anti-washout Admixture

DESCRIPTION

MasterMatrix UW 480 anti-washout admixture is a ready to use, powder admixture developed for concrete placed underwater. Concrete treated with **MasterMatrix UW 480** exhibits superior resistance to washout of cement and fines.

RECOMMENDED USES

MasterMatrix UW 480 is recommended for use in all types of concrete pumped underwater, where thixotropic action is desirable. **MasterMatrix UW 480** admixture is especially helpful in extreme conditions where conventional concrete or placing techniques would result in a high percentage of material loss due to washout.

MasterMatrix UW 480 admixture is particularly useful in mortar or grouting applications where mixtures are typically more fluid and have a higher potential for washout.

FEATURES AND BENEFITS

MasterMatrix UW 480 admixture produces a concrete mixture highly resistant to washout, while maintaining workability, pumpability, and placeability. The following special qualities are also provided:

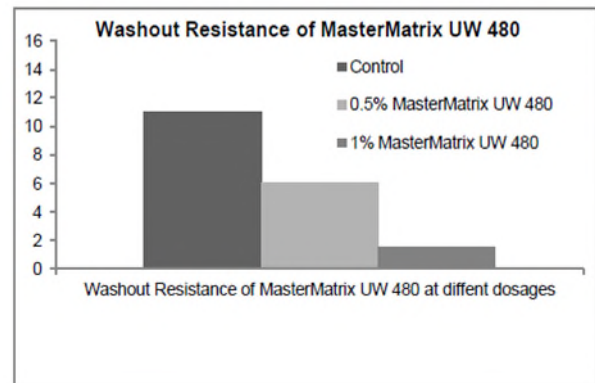
- Reduce or eliminate concrete bleeding
- Slump characteristics equal to untreated concrete
- Virtually eliminates segregation, even with highly fluid, high water-cementitious ratio mixes
- Reduce/eliminate costly methods of dewatering
- Thixotropic action provides stiffening after concrete is placed
- Minimised environmental impact of cement washout in water
- Minimal to no effect on set time

TYPICAL PERFORMANCE DATA

Form:	Powder
Colour:	White to yellow
Bulk density (20°C):	400-700kg/m ³
pH (20°C):	7.0-9.8 (1% solution)

Washout Resistance

Washout as determined by the US Army Corps of Engineers CRD-C61, "Test Method for Determining the Resistance of Freshly Mixed Concrete to Washing Out in Water", reports the performance of **MasterMatrix UW 480** admixture treated concrete compared to untreated concrete.



Cement content of 385 kg/m³, water-cementitious material ratio 0.49; slump 100 ± 15mm; non air-entrained.

APPLICATION

For underwater concrete ACI304R Chapter 8, "Concrete placed under water" recommends certain basis mixture proportions such as 355kg/m³ or more total cementitious with 15% pozzolanic material, a maximum water/cementitious ratio of 0.45, fine aggregate content of 45 to 55% by volume of total aggregate and air contents of up to 5%. A slump of 15 to 23cm is generally necessary and occasionally a slightly higher slump is needed. **MasterMatrix UW480** admixture should be used with a water reducing admixture from BASF.

For high slump concrete, use **MasterMatrix UW480** with admixture such as MasterGlenium SKY series. This combination can also produce a high performance self-compacting concrete that exhibits superior resistance to washout of cement and fines.

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Consumption

MasterMatrix UW 480 admixture is recommended for use at a dosage range between 0.3 – 1.0% by weight of cementitious content for most concrete mixtures using average concrete ingredients. Due to variations in job conditions, applications and concrete materials, dosage rate outside the recommended range may be required.

For additional information on **MasterMatrix UW480** or on its use in developing a concrete mixture with special performance characteristics, contact your local BASF Technical Sales Representative.

STORAGE

MasterMatrix UW 480 must be stored in its unopened original packaging at a dry ambient temperature.

PACKAGING

MasterMatrix UW 480 is supplied in 25kg bags

PRECAUTIONS

MasterMatrix UW480 is non-hazardous. However, it is recommended to follow standard chemical handling procedures. Wear gloves and eye protection when handling.

For detailed Health, Safety and Environmental recommendations, please consult and follow all instructions in the product Material Safety Data Sheet.

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STATEMENT OF RESPONSIBILITY

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

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