

# Mapeplast UWL

Liquid, Anti-Washout Admixture for Underwater Concrete

**FOR PROFESSIONAL USE ONLY**

## DESCRIPTION

*Mapeplast*<sup>™</sup> *UWL* is a liquid admixture that has been specifically developed to make highly cohesive and pumpable concrete and mortars, ideal to cast anti-washout concrete underwater. Due to its special formulation, adding *Mapeplast UWL* to the concrete mix improves its cohesion and increases its resistance to washout when it comes into contact with still or slow-moving water. *Mapeplast UWL* complies with the requirements of U.S. Army Corps of Engineers CRD-C 661-06 Specifications for Antiwashout Admixture for Concrete.

## WHERE TO USE

*Mapeplast UWL* may be added to all strength classes of both traditional and self-compacting concrete for the following types of underwater application:

- Rebuilding and repair work
- Structural elements
- Foundations

*Mapeplast UWL* can also be used as a viscosity-modifying agent to stabilize or improve the robustness of self-consolidating concrete mixes in all applications.

## CASTING TECHNIQUE

Concrete admixed with *Mapeplast UWL* may be applied using all traditional casting techniques, in particular:

- Through a hose
- By pumping
- From a hopper
- Along a chute

It is very important that underwater concrete is correctly applied to guarantee the maximum efficiency of *Mapeplast UWL*. When casting concrete, it is recommended to reduce its contact with water as much as possible and to make sure concrete flows slowly at a constant rate. Underwater concrete pumping is generally the most reliable technique because, once pumped at a higher pressure, it helps reduce segregation and honeycombs.

## WARNING

*Mapeplast UWL* significantly increases the concrete viscosity, thus making it more sticky to the sides of the mixing drums. It is strongly recommended to carefully wash the concrete mixers at the end of the production process to avoid contamination between the concrete admixed with *Mapeplast UWL* and subsequent batches.

## APPLICATION PROCEDURE

*Mapeplast UWL* is a ready-to-use product. It can be added in the mixer with all the other ingredients (water, cement, aggregates, and admixtures). Mix until well blended. Concrete admixed with *Mapeplast UWL* may be applied using all traditional casting techniques, in particular:

- Through a hose
- By pumping
- From a hopper
- Along a chute

## COMPATIBILITY WITH OTHER PRODUCTS

*Mapeplast UWL* may provide some plasticizing effect depending on the binder, therefore, the dosage in high-range water reducer might have to be adjusted.

*Mapeplast UWL* is compatible with all the other admixtures of the MAPEI range except *Mapefluid*<sup>™</sup> N200 [NA].

MAPEI's Technical Services Department is available to evaluate which admixture or admixture packages are most suitable for any specific need.

## DOSAGE RATES

The required dosage for *Mapeplast UWL* depends on specific site requirements. In general, it may vary from 200 to 500 mL per 100 kg to achieve anti-washout properties and from 100 to 300 mL per 100 kg as a viscosity modifying agent.

Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI Technical Services Department.

## PACKAGING

*Mapeplast UWL* is available in 208-L drums and 1 041-L totes.

## STORAGE

*Mapeplast UWL* can be stored for 6 months in sealed containers protected from frost. It is recommended to protect the product from damp and prolonged direct exposure to sunlight. Preferably store the product at a temperature range of 5 to 35°C. Verify product homogeneity if the product has been stored unused for a period of more than 3 months or ask your local MAPEI representative to verify product conformity before use.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Choose all appropriate safety equipment before use. When applying the product, wear protective gloves and goggles and take the usual precautions for handling of chemicals. If the product comes in contact with the eyes or skin, wash immediately with plenty of water and seek medical attention.

For further and complete information about the safe use of our product, please refer to the latest version of our Safety Data Sheet (SDS).

## WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible

for any consequences deriving from the use of the product.

Please refer to the current version of the Technical Data Sheet (TDS), available from our website [www.mapei.com](http://www.mapei.com)

### Technical Data (typical values)

Product Characteristics	
State	Liquid
Color	Light gray
Density	1.07 kg per L
Main action	Increases cohesion in concrete
Corrosivity	<i>Mapeplast UWL</i> does not contain calcium chloride or other chloride-based components. Its use will not contribute to the increased corrosion of reinforcing steel in concrete

## ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (SDS) for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact [sustainability-durabilite@mapei.com](mailto:sustainability-durabilite@mapei.com).

### LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at [www.mapei.com](http://www.mapei.com). **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

## CONTACT INFORMATION

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1-800-361-9309

### Customer Service

1-800-42-MAPEI (1-800-426-2734)

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For the most current product data and BEST-BACKED<sup>SM</sup> warranty information, visit [www.mapei.com](http://www.mapei.com).

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