Mapeplast UW is a powdered admixture that has been specifically developed to make highly cohesive and pumpable concrete and mortars, ideal to cast anti-washout concrete underwater.

**PROPERTIES OF THE PRODUCT**
Due to its special chemical nature, adding Mapeplast UW to concrete improves its cohesion and increases its resistance to washout when it comes in contact with still or slow-moving water.

**WHERE TO USE**
Mapeplast UW 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.

**CASTING TECHNIQUE**
Concrete admixed with Mapeplast UW 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 UW. 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 reducing segregation and honeycombs.

**WARNING**
Mapeplast UW is a powdered admixture with high viscosifying properties and may reduce the consistency and workability time of concrete. Therefore, before casting concrete, we recommend verifying its effect on the performance characteristics of the concrete and supplementing it with MAPEI superplasticising and/or set-retarding admixtures.

The concrete becomes more cohesive and more difficult to mix with water. This will increase its viscosity, thus making it more sticky to the sides of the mixing drums. It is strongly recommended to wash carefully the concrete mixers at the end of the production process in order to avoid contamination between the concrete admixed with Mapeplast UW and the subsequent ones.

**HOW TO USE**
Mapeplast UW 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.

**COMPATIBILITY WITH OTHER PRODUCTS**
Mapeplast UW does not have any plasticising effect on concrete. Therefore, we strongly recommend combining it with a super plasticising admixture from Dynamon range.

Mapeplast UW is compatible with other admixtures of the MAPEI range used to produce special concrete,
especially the following:
• Mapeplast SF, silica fume-based powdered admixture used in the production of highly durable concrete;
• fly-ash and lime-based fillers used to produce both conventional and self-compacting concrete;
• set-retarding admixtures from the Mapetard range.

DOSAGE
The required dosage for Mapeplast UW depends on specific site requirements. In general, it may vary from 0.6% to 3% by cement weight. Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI Technical Services Department.

PACKAGING
Mapeplast UW is supplied in boxes containing 4 hydrosoluble bags, 3 kg each.

STORAGE
Mapeplast UW may be stored for 12 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 temperatures from +5°C to +35°C. The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Mapeplast UW contains cement that when in contact with sweat or other body fluids causes irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes. 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.

PRODUCT FOR PROFESSIONAL USE.

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, available from our website www.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 or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com. ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

All relevant references for the product are available upon request and from www.mapei.com