

# Mapeplast UW

## Anti-washout, cohesion-inducing admixture for underwater casting



### DESCRIPTION OF PRODUCT

**Mapeplast UW** is a powder-form admixture, ideal for preparing extremely cohesive concrete which is easy to pump, to carry out underwater casting applications without washout of the cementitious mix.

### WHERE TO USE

Thanks to its special formulation, **Mapeplast UW** allows anti-washout concrete to be laid, even when cast in open or flowing water.

**Mapeplast UW** may be used in all types of underwater applications:

- underwater casting of structural elements;
- repair and renovation work;

Various application techniques may be used:

- casting by pumping or through pipe-work;
- free casting with large cement buckets;
- casting along channels.

### TECHNICAL CHARACTERISTICS

**Mapeplast UW** is an anti-washout admixture in powder form, used for cast concrete or mortar. By adding **Mapeplast UW** together with a super-plasticiser from the Dynamon range, concrete suitable for underwater applications and with the

following characteristics is obtained:

- no washout of cement or fine particles;
- cohesive;
- stable with no segregation;
- self-compacting;
- easy to pump.

**Mapeplast UW** does not have plasticising properties. To create highly flowable or self-compacting concrete, a super-plasticising admixture from the **Dynamon** range must be added.

### APPLICATION PROCEDURE

**Mapeplast UW** is added into the cement mixer together with all the other ingredients (water, cement, aggregates and super-plasticising admixture). Mix well until an homogenous mix is obtained. Because of its high level of cohesion and the difficulty in mixing with water, the concrete will be more viscous and will stick to the blades and the inside of the cement mixer more than with traditional concrete.

### CONSUMPTION

5-10 kg per m<sup>3</sup> of concrete.

# Mapeplast UW



Appearance of concrete after initial slump test

TECHNICAL DATA (typical values)		
<b>PRODUCT DETAILS</b>		
<b>Consistency:</b>	powder	
<b>Colour:</b>	white	
<b>Bulk density (kg/m³):</b>	1,100	
<b>Soluble chlorides content according to EN 480-10:</b>	< 0.1 (absent according to EN 934-2)	
<b>Shelf life:</b>	12 months under dry conditions	
<b>Hazard classification according to EC 1999/45:</b>	none. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet	
<b>Customs class:</b>	3824 40 00	
<b>MIX DESIGN EXAMPLES</b>		
<b>CEM IV/A (kg/m³):</b>	310	310
<b>Fly ash (kg/m³):</b>	120	120
<b>5-15 Gravel (kg/m³):</b>	650	650
<b>0-5 sand (kg/m³):</b>	1080	1080
<b>Water (kg/m³):</b>	195	200
<b>Dynamon SX (l/m³):</b>	7	7
<b>Mapeplast UW:</b>	//	5
<b>A/L (C+CV):</b>	0.45	0.45
<b>Flow (mm):</b>	650	630
<b>Appearance:</b>	homogenous free flowing subject to leaching	homogenous free flowing



Assessment of leaching and appearance of concrete after testing

### PACKAGING

Boxes containing 4x3 kg bags.

### STORAGE

**Mapeplast UW** must be stored under dry conditions. If stored correctly, the quality of the product will remain stable for at least 12 months.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Mapeplast UW** contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction. Wear protective clothing, gloves and eye/face protection. For further information, please refer to the Safety Data Sheet.

FOR PROFESSIONALS.

### 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.*

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**

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UW**

