



COMPLYING WITH EU RULE
UNI EN 1504-2
MC-PR
CONCRETE PROTECTION AND RESTORATION

DESCRIPTION OF THE PRODUCT

Two-component, waterproofing, elastic, colored mortar, resistant to U.V. exposure and to positive and negative hydrostatic pressure. Due to high degree of elasticity WINTAPLAST is particularly suitable for applications over large surfaces. It can be used horizontally and vertically on inside and outside applications. The product can be applied over concrete, masonry, natural and artificial stones, ceramic tiles, wood, steel, galvanised sheet metal or other non-oxidising metals. After proper application and curing WINTAPLAST is waterproof, permanently elastic and has superior resistance to abrasion while remaining unaffected by adverse weather conditions, frost and salts.

WINTAPLAST has obtained the important **EC1 PLUS**, which identifies EMICODE certified products: building products with very low emissions of volatile organic compounds (VOCs) and semi-volatile ones.

FIELDS OF USE

WINTAPLAST can be used in projects such as:

- Repairing and reconditioning concrete structures, including those under large stress.
- Waterproofing new and old surfaces subject to heavy pedestrian traffic, both indoors and outdoors.
- Waterproof coating of fountains, pools, artificial lakes, swimming pools and tanks of non-drinkable water.

SURFACE PREPARATION

The substrate must be clean, dry, cohesive, free oil crumbly parts, oils, or other non-stick substances. Irregularities of up to 1.5 mm can be restored with WINTAPLAST. Absorbent substrates such as concrete, plaster, masonry etc. shall be dampened beforehand.

Prior to the application of WINTAPLAST it is highly recommended the use of BC SEAL BAND (self-adhesive butyl tape coated with polypropylene non-woven fabric) for proper reinforcement and sealing of corners and penetrations.

SURFACES WITH EXPANSION JOINTS OR CONTROL CUTS shall be pre-treated with WINJOINT BAND (waterproof elastic strip, made from rubber and polyester fabric). Apply WINJOINT BAND as follows: apply WINTAPLAST along each side of the joint line, enough to be able to embed the WINJOINT BAND perforated lateral sides strips into the wet product. Ensure the fresh product "bleeds out" through the perforated strips.

PRODUCT PREPARATION

Shake Component B before use. Pour approximately $\frac{3}{4}$ of component B (white liquid) into a clean recipient and slowly add Component A (white powder) mixing constantly at low speed. After pouring all powder into the mix, add the remainder of Component B and continue to mix (at least 4 additional minutes), until achieving a consistent mix with no lumps.

ADVICES

Do not add water to the preparation.

Do not add cement or additives.

Do not use if packaging is damaged.

APPLICATION

Apply WINTAPLAST with metal putty knife, trowel or flat brush.

Maximum wet film thickness per coat must be 1.5 mm. Subsequent coat can only be applied after the previous coat is completely dry (10-12 hours at +20°C), but no later than 72 hours. Maximum total thickness of all coats is 3 mm, except any polishing treatment. The surface is walkable after 24 hours from the first coat at +20°C. Avoid mechanical stress for minimum 3 days. Total hardening is reached after 7 days. Do not allow the product to dry too quickly. For this reason, the user shall protect the freshly applied material from direct sun exposure and/or excessive air currents or wind. Apply and cure at temperatures between +5°C and +35°C.

To improve the finish appearance, it is recommended to use a sponge trowel before product setting is complete (around 2 hrs at 20°C).

CAUTIONS

To avoid shrinkage cracks, avoid application during wind or under direct sun exposure.

Respect the application temperatures range between +5°C and +35°C.

HARDENING TIMES

Setting and hardening is highly dependent on the temperature.

At 20°C, a surface coated with WINTAPLAST is ready for pedestrian traffic after 24 hours from the completion of the last coat. Total hardening is achieved after approximately 7 days. For applications in pools, tanks, fountains, swimming pools and any structure designed to hold water, wait at least 7 days from the last application before flooding.

CONSUMPTION

1.8 kg/m² per mm of thickness.

As waterproofing coating, resistant to abrasion, in positive pressure: 3.6 - 4 kg/m² in two coats.

As waterproofing coating in negative hydrostatic pressure: 4.5-5 kg/m² in three coats.

Any prior polishing treatment of the substrate will required a further consumption.

TOOL CLEANING

Use clean with water when product is fresh.

When product is dried remove mechanically.

PACKAGING

WINTAPLAST is available in two packaging options:

- 36 kg Package: (Component A 26 kg & Component B 10 kg)

- 18 kg Package: (Component A 13 kg & Component B 5 kg)

Colors: WHITE – CREAM YELLOW (as per RAL 9001) – GREY (as per RAL 7032/7033/7040) – BLUE (as per RAL 5012).

STORAGE

Product can be stored in a dry and sheltered place at temperatures between +5°C and +35°C for 12 months in its complete and undamaged packaging. Does not tolerate frost.

SAFETY REGULATIONS

PRECAUTIONS

For information regarding safety regulations, the user must refer to the most recent Safety Sheet, issued in compliance with the Regulations in force, containing the physical and toxicological information and other information related to the product being used

ECOLOGY

Do not dispose of the product and/or empty containers into the environment. Consult the most recent Safety Sheet for further information regarding any waste disposal.

Features of components:		
Component	A	B
Appearance	Powder	Milky liquid
Colour	White	White (can be colored)
Mixing ratio	2.6	1
Solid content (%)	100	48

Product characteristics after mixing:

Consistency	Trowel grade paste
Mixed product working life	2 hours at 20°C
Density mass of mixed product (kg/dm ³)	1.8

HARDENED PRODUCT FEATURES COMPLYING WITH UNI EN 1504-2

Water Vapour permeability (UNI EN ISO 7783)	Sd < 5 m (<u>Sd=3m; $\mu=1500$</u>) (permeable by water vapour)
Capillary absorption (UNI EN 1062-3)	< 0,1 kg/(m ² .h ^{0.5}) (Class III: Low permeability)
Adhesion strength (UNI EN 4542) - Substrate C (0.70) For horizontal application with traffic	≥ 1,50 N/mm ²
Abrasion Resistance TABER TEST Grinding wheel CS17 1000g 1000rotations (ASTM D3389, ASTM D4060)	Weight loss: 107mg % loss: 0.66
Impact resistance (UNI EN 1542)	Class III: ≥ 20 N.m
Fire reaction	F

HARDENED PRODUCT FEATURES: WATERPROOFING

Waterproof under positive water pressure	Up to 7 bars
Waterproof under negative water pressure	> 1,5 < 2 bars
Water absorption (7days) ASTM D 471	6.82%

HARDENED PRODUCT FEATURES: MECHANICAL RESISTANCES

Flexural strength at 28 days EN 12190	1.98 N/mm ²
Compressive strength at 28 days EN 12190	6.90 N/mm ²

Resistance to de-icing salts	No detachment
Breaking load (N/mm ²) ASTM D 2370	1.14
Elongation at breaking point (%) ASTM D 2370	30
Elongation at breaking point (%) ASTM D 2370 after accelerated weathering (1000 hours)	15
Adhesion to substrate: (UNI EN 1540):	
Concrete	≥ 1.60 N/mm ²
Tile	≥ 1.60 N/mm ²
Wood*	≥ 1.12 N/mm ² *wood delamination
Sliding / surface skidding resistance (UNI EN 13036-4 Pendulum method)	
Dry surface:	Value: 75 – required: ≥ 40
Wet surface:	Value: 65 – required: ≥ 55

CRACK BRIDGING ACCORDIN TO UNI EN 14891

	Value obtained	Value required
Crack Bridging (+23°C)	1.13 mm	0.75 mm
Crack Bridging (+5°C)	1.10 mm	0.75 mm
Crack Bridging (-5°C)	0.98 mm	0.75 mm
Crack Bridging (-20°C)	0.80 mm	0.75 mm

HARDENED PRODUCT FEATURES: CHLORIDE RESISTANCE (UNI EN 13529)

Resistance to severe chemical attacks - UNI EN 13529 Performance determined by the SOCOTEC ITALIA s.r.l.		
Exposure days	Alterations due to exposure	SHORE D hardness (UNI EN ISO 868)

None	None	35
3 days	None	34
28 days	None	40
Test liquid: Swimming pool water consisting of: deionized water, trichloroisocyanurate (ratio 10g per m³) and anti-algae (ratio 0.5 l per 100m³)		

Adhesion to the concrete substrate after contact with distilled water and swimming pool water

Exposure days	Alterations due to exposure	Direct adhesion (UNI EN 1542)
None	None	$\geq 1.60 \text{ N/mm}^2$
28 days into distilled water	None	$\geq 1.58 \text{ N/mm}^2$
28 days into swimming pool water	None	$\geq 1.55 \text{ N/mm}^2$

Volatile Organic Compounds Emission

Parameter	Max. allowed concentration ($\mu\text{g}/\text{m}^3$)
TVOC after 3 days	≤ 750
TVOC after 28 days	≤ 60

Test performed by the EUROFINS institute according to EN 16516, ISO 16000-3-6-9-11 and ASTM D5116-10, Test report n. 392-2018-00081401_G_EN

PRODUCT FOR PROFESSIONAL ONLY

Product meets with prescriptions of 2003/53/CE Directive.

The information contained in this technical data sheet is to the best of our knowledge correct. However, by no means can it be considered a guarantee, as usage, working area and application of the product in accordance with the instructions given and their success in application is beyond our control and is dependent on a number of factors. We decline any responsibility for the improper use of the product as the application recommendations contained herein are to be considered as a general guideline. If at all in doubt, preliminary tests should be carried out. WINKLER S.r.l. reserves the right to modify and update said data sheets without prior notice. Clients are kindly requested to verify that they are in possession of the current edition.