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TEKNALAV

Solvent-based retardant lacquer made of aesthetic concretes with visible aggregates "washed" effect



DESCRIPTION

TEKNALAV is a solvent-based retardant lacquer applicable both in negative and positive, for the realization of aesthetic concretes with visible aggregates "washed" effect.

It delays the grip and hardening of the surface part of the concrete allowing its removal with high-pressure washing. The 12 different types, easily recognizable by their bright colors, allow to obtain the appropriate depth of excavation. You will have to choose a depth of excavation related to the size of the aggregate so as to enhance its aesthetics but without the risk of easy detachments.

TEKNALAV is the ideal product for all different types of washed concrete surfaces: prefabricated panels, artifacts for street furniture and gardening, prefabricated immediate draft, floors and sidewalks with exposed inert.

Its use is easy and advantageous: it has an excellent covering effect so that it is sufficient to apply it in one hand, it dries quickly creating a tenacious and abrasion-resistant film, it leaves few residues after disarmament making it easy and fast to clean the mold.

PRODUCT
FOR PROFESSIONAL USE

Type	Color	Washing depth	Grain size consugliata
S/Micro	Turquoise	Ca. 0.2 mm	0-3 mm
S/01	Blue	Ca. 0.5 mm	0-4 / 8 mm
S/02	Brown	Ca. 1.0 mm	2-4 / 8 mm
S/10	Green	Ca. 1.5 mm	4-8 / 10 mm
S/25	Yellow	Ca. 2.0 mm	4-8 / 10 mm
S/50	Red	Ca. 2.5 mm	6-9 / 12 mm
S/80	Grey	Ca. 3.0 mm	8-11 mm
S/100	Mustard	Ca. 3.5 mm	9-12 mm
S/130	White	Ca. 4.0 mm	12-16 mm
S/200	Orange	Ca. 5.0 mm	16-22 mm
S/300	Violet	Ca. 6.0 mm	16-22 mm
S/400	Violet	Ca. 7.0 mm	18-25 mm

The values of washing depth and recommended particle size are approximate, as they depend on multiple factors: correct and uniform application of the product, type and quantity of cement, A/C ratio, particle size mix and quantity of fines, maturation times and temperatures. Preliminary tests in the actual conditions of use are recommended.

NB: to obtain constancy in the aesthetic appearance of surfaces with the lowest washing depths (in particular Micro-0.1-0.2), it is necessary an excellent control of all these factors and their constancy over time.

INSTRUCTIONS FOR USE

TEKNALAV should be mixed before each use. It is better to use a low-speed electric agitator. Contains volatile solvent, close the packaging after each use.

SHEET



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NEGATIVE APPLICATION

TEKNALAV must be applied to the clean formwork in a continuous and uniform layer. The pigmentation of the product facilitates the operation by highlighting its possible imperfect application. A short-haired roller or brush for small surfaces and retouching is generally used. Spray systems can be used, preferably air-less.

Respect the recommended doses: a product deficiency can lead to aesthetic defects due to the inevitable small application discrepancies; its excess prolongs the drying time and worsens the cleaning of the formwork.

The product has a passivating effect on the formwork and particular care must be taken to production changes: it is advisable to apply an extra 10-20% of product in the first application on a clean formwork and perform a thorough cleaning of the formwork (also with solvent and disarming oil) to the change from finish washed to bottom formwork.

The pouring of concrete can begin when the product is dry to the touch and tenacious (between 15 and 30 minutes depending on weather conditions).

POSITIVE APPLICATION

TEKNALAV is applied by spraying directly on the surface of fresh concrete in a continuous and uniform layer (complete pigmentation must be obtained).

For horizontal surfaces and flooring is applied after smoothing; it is necessary to wait until the exudation water has disappeared from the surface.

For prefabricated products with continuous demoulding, it can be applied immediately to disarmament.

The dried product protects the concrete from evaporation and possible weak rain.

CONCRETE: MIXTURES AND INSTALLATION

The mixtures to be used for concretes with visible aggregates are the most varied in relation to the aesthetic effect to be obtained. Generally they are discontinuous: a fraction of about 30% of fine parts (cement and aggregates such as fillers, marble powders or sands D max 1-1.5 mm) and 70% of the aggregate that you want to highlight with washing.

The workability depends on the conditions of installation: for the casting of deactivated flooring a plastic consistency is necessary to prevent the sinking of the large aggregates, for applications to the negative it is preferable a greater workability to facilitate the arrangement on the bottom of the formwork. In all cases it is necessary to prevent the segregation of the dough that would determine areas with different distribution of aggregates and consequent different depths of washing and aesthetic appearance. The use of new generation superfluidifying additives (**SUPERIOR** or **UNICUM**) is recommended to ensure, in addition to compliance with the A/C ratio, also the workability and cohesiveness appropriate to the conditions of installation.

IMPLEMENTATION FOR NEGATIVE APPLICATION

The concrete will be poured on the formwork in a uniform layer, usually not less than 3 cm thick, with caution so as not to cause abrasion and displacement of the retardant. For very fluid mixtures with a risk of segregation it is advisable to carry out the operation in several "passes". We proceed to the leveling of the concrete with rasps or trowels always with caution so as not to move the retardant. Compaction can be done either with vibration of the formwork (evaluate intensity, distribution and time in relation to thickness and consistency) or with vibrating plates applied to the concrete surface. Avoid grout leaks from banks and separators: they determine greater thickening of the aggregates on the edges and possible formation of dangerous crawl spaces at future sealing.

All operations must be completed within 15-30 minutes of pouring and after this time the concrete must no longer be moved or vibrated in contact with the retardant: the dough water has brought the active ingredient into solution that begins to perform its function.





IMPLEMENTATION FOR POSITIVE APPLICATION

The concrete will be poured with a plastic consistency and finished with vibrating staggia. A "closed" surface must be obtained with the large "wire" aggregates: their "sinking" and an excess of cement paste on the surface do not allow to obtain satisfactory results after washing.

ACCELERATED MATURATION

There are no contraindications in adopting forced maturation cycles for washed concrete surfaces; the general indications on thermal cycles (start time and heating, maximum temperature and cooling) must be respected, also evaluating the particular nature of the mixtures used and their aesthetic function.

The choice of the type of retardant to be used is influenced by the times and maximum temperatures of the maturation cycles; preliminary tests are recommended.

WASHING

It is commonly performed in a daily cycle, so with jet times of 16 - 20 hours. Delayed washing to 48 and 72 hours is possible: it may be necessary to adopt a retardant with greater depth of excavation, and preliminary tests are required.

After disarmament, washing must be carried out as soon as possible, within 2-4 hours at most: exposure to the surface air neutralizes the effect of the retardant, the cement grip starts again, washing becomes more difficult and less effective. Maximum attention in particular in the presence of hot and windy climates.

High-pressure water jets are generally used for washing. Specific automatic equipment with multiple brushes and water jets can be used. A thorough final rinse is recommended to eliminate grout residues and cement dust.

USE OF RECLAIMED WATER

TEKNALAV does not contain substances that may create prejudice to the use of washing water in the production of concrete as a fraction of slurry water.

RECOMMENDATION

Any electrical equipment used in connection with TEKNALAV (pump motors, etc.) must be explosion-proof. Teflon gaskets are recommended.

CONSUMPTION

80-140 gr/m²

They depend on the type of application and the formwork.

PACKS

Metal buckets 20 Kg

CONSERVATION AND VALIDITY

Store in a cool, well-ventilated place; not afraid of frost. Validity of 12 months from the date of manufacture in the original closed containers.

SAFETY

Flammable product. For more information, please consult the safety data sheet.

LEGAL

The information contained in this technical sheet, although representing the most advanced stage of knowledge, does not exempt the user from performing accurate preliminary tests in their conditions of use and operation. We therefore decline any responsibility for the improper use of the product.

