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**WE SERVE MORE THAN 50 COUNTRIES
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FOR CONSTRUCTION !



WATER REPELLENTS ADDITIVES



**Гидрофобизато
РЫ**

ESASIL® 300P / ESASIL® 303P

Characteristics:

- Powder water repellent
порошковый гидрофобизатор
- Siloxane BASE

на основе силоксана

For joint mortar:

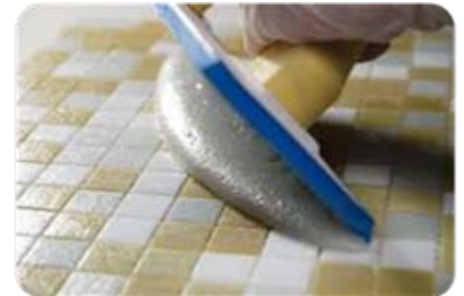
Joint mortar formulated with ESASIL® P types develops strong hydrophobic effect.

Рец-ры СС с ESASIL® P обладают стойкой и продолжительной по времени гидрофобностью

For exterior and interior plasters:

Plasters and mortars formulated with Esasil® P types develop optimum water proofing properties.

При использовании в рец-рах внутренних и наружных штукатурок, шпатлёвок. Сохраняет стойкий гидрофобизирующий эффект длительное время



Evaluating water repellent efficiency of hydrophobising additives

Анализ гидрофобизирующего эффекта силиконовых порошков

PREPARATION OF SAMPLES

Several samples using product RASOSTUK (mixture of white cement, aggregates, additive and redispersible powder) were prepared.

1 “white sample” was prepared.

Samples formulated with 0,3% Powder Water Repellent additive were prepared as follows.

(mix in a becker 170 gr of mixture, add 32 gr of water and 0,5 gr of water-repellent. Then mix for few minutes till obtaining an homogeneous mixture. Then the mixture was placed into molds and left to dry).

TEST : Permeability (проницаемость)

Evaluation of the surface permeability exposed to atmospheric agents.

Анализ проницаемости поверхности на воздействие атмосферных агентов.

Description:

On the surface of the dry sample, Karsten tube was sealed and filled with water till indicated level. Finally, in specific period of time, quantity of water absorbed by sample was specified.

Pictures of white cement sample



Beginning



30 minutes



1 hour



3 hours

Pictures of cement with ESASIL® 303 P



BEGINNING



30 MINUTES



1 HOUR



3 HOURS



24 HOURS



48 HOURS

Pictures of cement with ESASIL® 300 P



BEGINNING



30 MINUTES



1 HOUR



3 HOURS



24 HOURS



48 HOURS

Pictures of cement with competitor product



BEGINNING



30 MINUTES



1 HOUR



3 HOURS



24 HOURS



48 HOURS

Pictures of cement with zinc stearate



BEGINNING



30 MINUTES



1 HOUR



3 HOURS



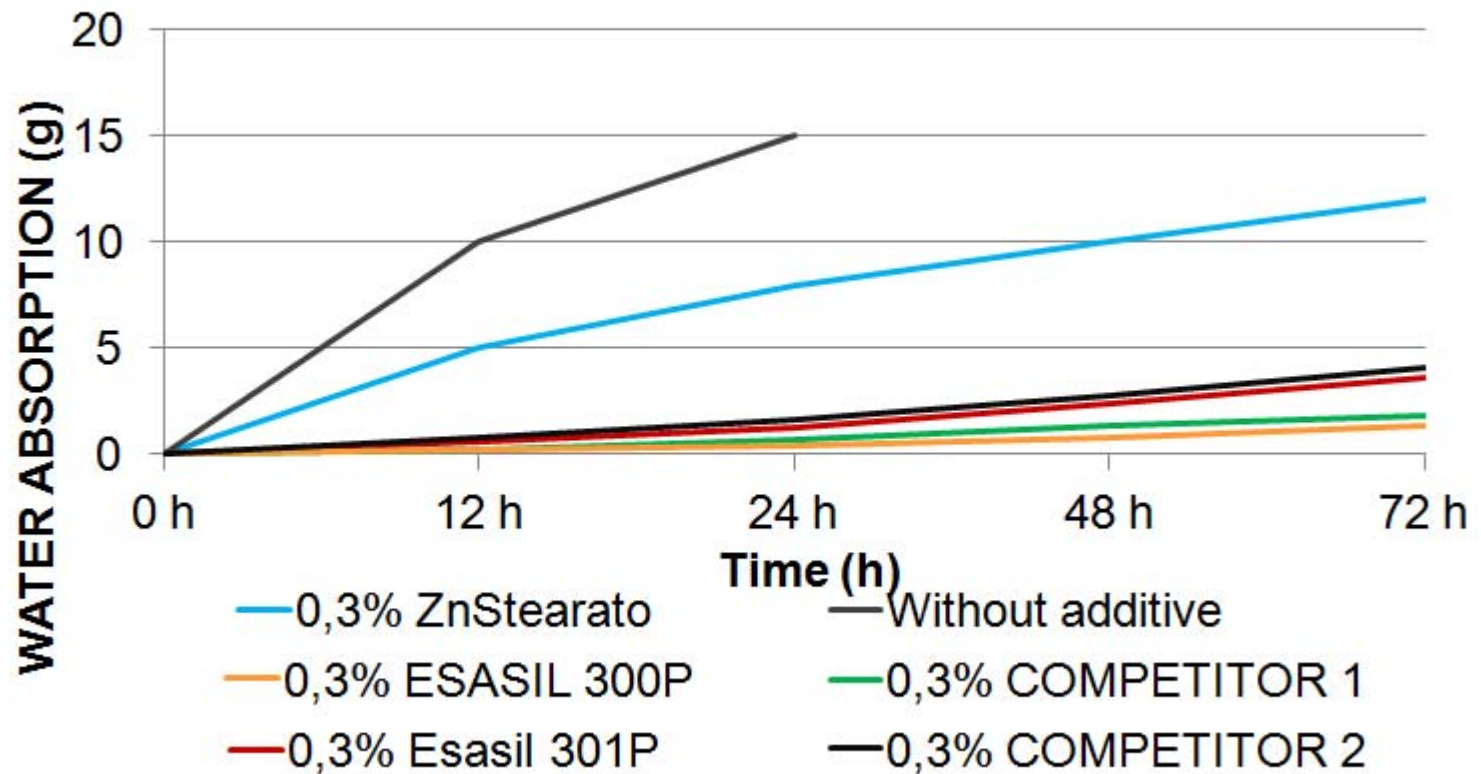
24 HOURS



48 HOURS

COMPARISON:

WATER ABSORPTION TEST



Benefits:

ESASIL® P Types

Optimum Hydrophobic effect of the final cured system (высокая гидрофобность изделия)

Excellent pearl effect (значительно усиливает «эффект лотоса»)

Efficiency for prolonged period (years) (длительное многолетнее стойкое действие)

Does not affect the flow properties of the mortar (не оказывает влияния на хар-ки текучести)

Does not interact with the adhesion properties of the system (не оказывает влияния на адгезивные СВ-ВА)

Does not create film on the surface (не образует поверхностной плёнки)

Does not change permeability of the cured system (не меняют паропроницаемость системы)

COMPARISON:

	Stearate	ESASIL® P types
% of use	1%	0,2%
Durability Продолжительность	Less than 1 year Менее 1 года	5 years 5 лет
Properties Свойства	Provides hydrophobic effect only on the surface Гидрофобизирующий эффект только по поверхности	Provides mass hydrophobation Гидрофобизация в массе
		Suppressing of blooming effect Уменьшает выцветание

COMPARISON:

	ESASIL® 300 P	ESASIL® 303 P
Base (ОСНОВА)	Powder Siloxane	Powder Siloxane
pH	8-9	8-9
Water Proofing effect (гидрофобность)	++++	+++
Water Solubility (рас-ть в воде)	No	Yes
Solubility in the dry system (рас-ть в смеси)	++++	++++
Long lasting effect (продолжительность действия)	++++	+++
Incorporation of water in the dry system (инкорпорация воды в смеси)	++	++++

ESASIL® 300P: Indicative formulations

SKIM PLASTER WATER REPELLENT		REPAIRS MORTAR (FINISHES)		THIN BAD RENDER CEMENT-BASED	
White port. Cement	20	Port. Cement 42,5	38	Port. Cement 42,5	33
Silica sand 0,06-2mm	34	Hydrated lime	3	Hydrated lime	3
Calcium carbonate 0,5-1,5mm	10	Microsilica	4	Quartz sand 0,07-0,12mm	62
Calcium carbonate 1-2mm	5	Quartz sand 0,1-0,3mm	51,3	Methyl Cellulose modified 2000-5000 mPas	0,5
Calcium carbonate 0,3-0,7mm	28	Plasticizer	0,4	Vinyl powder	1,5
Methyl Cellulose modified	0,02	Methyl Cellulose modified 10000 mPa	0,1	Esasil® 300P (301P,303P)	0,15
Esasil® 300P (303P)	0,2	Esasil® 300P (301P,303P)	0,2		
Vinyl powder (W.R. **)	1,5	Vinyl powder (W.R. **)	3		
Pregelatinized starch	0,03				
Water	18 parts	Water	24%	Water	26%

TENSIL P80



Concrete is subjected to changes in volume.

Цемент меняется в объёме по мере
высыхания

Volume change is a critical parameter and affects the long-term strength and durability.

Изменение объёма может оказывать
критическое влияние на прочность и
долговечность

The volume change in concrete causes micro and macro cracks in concrete.

Изменение в объёме может стать причиной
микро и макро трещин



TENSIL P 80

PRODUCT NAME	BASE	APPEARANCE	COLOUR	ASH CONTENT	SOLUBILITY
TENSIL P80	Glycol	Powder	White	32%	Active ingredients are soluble on water

TENSIL P80 is formulated :

- 1) to reduce shrinkage (уменьшение усадки)
- 2) To suppress cracks in cement-systems (подавляет появление трещины)
- 3) To obtain a uniform surface (получение однородная поверхности)

APPLICATIONS

- Self Levelling compound (наливные полы)
- Cement based mortars (цементные смеси)
- Floor Screeds, industrial flooring (цементные стяжки)

Additional Features:


- 1) Does not affect consistency of the slump (не влияет на консистенцию бетонной смеси)
- 2) Does not affect the properties of construction compound (не влияет на технические свойства смеси)



TEST:

Purpose: monitor loss of length in % of the mortar samples

	SAMPLE N° 1	SAMPLE N° 2	SAMPLE N° 3
	MORTAR without additive	MORTAR + 0,5% of COMPETITOR Anti-shrinkage	MORTAR + TenSil P80
Loss of length in %	1,9%	0,06%	0,03%

TEST REPORT N° 713-1-15	
SAMPLE DESCRIPTION	SAMPLE DESCRIPTION: Mortar prepared mixing Natural Hydraulic Lime NHL (Calix Blanca) and Sand Ticino (VAGA) with a ratio aggregate/binder 1.25 / 0.75 in volume
SAMPLE PREPARATIONS	According UNI EN 12617-4:2003
SAMPLE STOCKAGE	Standard laboratory conditions at 21±2°C and 60±10% U.R.
TEST PERIOD	Between 13° January 2015 and 11° February 2015
 Via lago di Costanza 55 36015 Schio (VI) Tel. +39 0445 1742464	



THANK YOU FOR YOUR ATTENTION



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