

USHING THE PROPER STONE CARE PRODUTS TO PROTECT STONE

A SPECIAL FORMULATED IMPREGNATOR FOR THE PROTECTION OF CONCRETE

A GENERAL WATERPROOFING AGENT FOR CONCRETE PRODUCTS

ISHINOL SERISE KONFRESH 3 0 0 0

KONFRESH 3000 is an alkylsilane / alkylsiloxane blend, mixed with a specialty solvent. It is easily applied on concrete, cement, mortar, cement block, secondary cement products, brick, tile and other surfaces. KONFRESH 3000 creates an invisible, permeable, waterproof surface that repels stains and oil. KONFRESH 3000 creates a sub-surface layer which gives added protection and increases the durability of the material being coated and prevents expansion, acid substances from marring the surface, efflorescence (CaCO₃), and general stains. Also, protects against ageing and weathering. Additional applications will enhance the previous coating, the first applications acting as a primer.

Preserves the natural beauty of stonework construction.

[CHARACTERISTICS]

KONFRESH 3000						
Appearance	Clear colorless liquid					
Components	Alkylsilane / alkylsiloxane blend and a specialty solvent					
UN COAD	CLASS: Class 3 NUMBER: 1263					
Storage	1 year (storing blow 30 °C in a sealed container)					
Packing	$20~\ell$ round can					

[FEATURES]

1. PREVENTS THE ABSORPTION OF DAMAGING SUBSTANCES

After applying KONFRESH 3000, the rate of absorption decreases from 1/5 to 1/10 compared with non – treated concrete.KONFRESH 3000's invisible layer enhances and protects the surface against stains, mold, expansion, acid substance, efflorescence and other damaging substances.

2. ENDURANCE

KOFRESH 3000, depending on the type of concrete products being used, penetrates deep into the concrete between 2 mm - 6 mm creating resistances to damaging ultraviolet rays and weathering.

3. RESISTANCY TO WEATHER AND POLLUTION

Prevents the formation of efflorescence is on the surface which causes premature deterioration and mars the beauty of the structure. Also, protects against damaging stains – such as smog, acid rain, etc.

4. RESISTANCY TO CHEMICALS

KONFRESH 3000 effective range of protection is pH 2 – pH 14.

5. AREA OF USAGE

KONFRESH 3000 as a foundation, prevents expansion in floors and roofs prior to cladding or covering. Protects and preserves concrete, cements, mortars, grouts, block, secondary concrete products, brick and joint work.

(USAGE)

1. PREPARATIONS

- ① Completely remove all oil, wax, plant droppings or dirt before applying KONFRESH 3000. HAKULI SAFE (ISHICLEAN Series) is recommended.
- ② Remove stains and oil. Prior to application, check to make sure that area is dry.
- ③ Repair cracks and other damaged areas prior to coatings. If patch work is necessary, use a resin based filler.

2. COATING PROCEDURES

- ① Do not dilute KONFRESH 3000 Standard coverage 1ℓ/3~5 m² Apply KONFRESH 3000 with, a roller, a brush (Do not use spray)
- ② KONFRESH 3000 dries to create an invisible surface, for best results, continuously coat small areas.
- 3 Standard application: coat 2-3 times for best results, however, do not coat in excessive.
- ④ The coated surface should dry within a 4 hour period at 20 °C. Do not allow coated surface to get wet during this 4 hour period.
- ⑤ Mortar and grout joints should be given additional coats, absorption is greater in these areas. Wipe excess liquid off tile and stone surfaces.
- 6 KONFRESH 3000 used as a primer for floors or roofs, after 4-6 hours, paint or other coating agents may be applied to the dry surface.

3. NOTE

- ① Follow safety regulations for solvent based products. Indoor applications wear a protective mask and ventilate area properly.
- ② KONFRESH 3000 doesn't penetrate surface if residual floor wax of oil film coatings remain.
- ③ Wash tools and implements with thinner after processing area.
- ④ If KONFRESH 3000 comes into bodily contact, wash thoroughly with plenty of soap and water.

[TEST DATA]

KONFRESH 3000 and a variety of similar products were coated on mortar plates to test waterproofing ability, and resistances to the following – alkaline, acid, salt water compared with other products on the market.

1.TEST PLATE USED

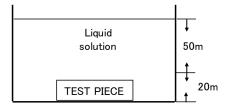
A $50 \times 50 \times 20$ mm piece of JIS mortar.

2.APLICATION

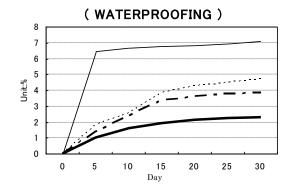
The mortar plates were soaked in a variety of similar waterproofing agents, then cured at a normal temperature for 2 weeks.

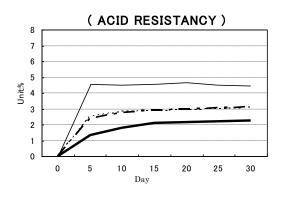
3.TEST METHOD

The test piece was placed on the bottom of a plastic tank. (Chart at blew) The tanks were filled with different products to compare the ability to resist hydrochloric acid at 0.1 N, caustic soda at 0.1 N, fresh and salt water.



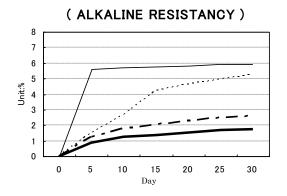
[COMPARISON TEST]





	0 日	5日	10日	15 日	20 日	25 日	30 日
Non tested	0	6.45	6.65	6.76	6.85	6.95	7.09
Konfresh3000	0	1.01	1.58	1.90	2.11	2.23	2.27
- · · A Product	0	1.39	2.38	3.38	3.63	3.77	3.83
······B product	0	1.80	2.58	3.85	4.25	4.50	4.70

	0 日	5 日	10 日	15日	20 日	25 日	30 日
Non tested	0	4.55	4.51	4.56	4.68	4.51	4.45
konfresh3000	0	1.31	1.82	2.10	2.15	2.22	2.25
- A Product	0	2.40	2.76	2.93	3.00	3.09	3.11
······ B product	0	2.52	2.80	2.88	2.90	2.97	3.07



	(S	ALT	WATE	ER RE	ESIST	ANC	Y)
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7			***************************************		***************************************		
6							
5		$- \Gamma$					
Unit:%		/_					
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2	/						
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0							
	0	5	10	15	20	25	30
				Day			

	0 日	5日	10 日	15 日	20 日	25 日	30 日
Non tested	0	5.59	5.69	5.76	5.84	5.93	5.94
Konfresh3000	0	0.85	1.25	1.37	1.55	1.68	1.73
- A Product	0	1.25	1.81	2.09	2.30	2.49	2.59
······B product	0	1.55	2.65	4.24	4.61	4.95	5.27

	0 日	5 日	10 日	15日	20 日	25 日	30 日
Non tested	0	5.46	5.56	5.62	5.68	5.73	5.74
konfresh3000	0	0.45	0.60	0.64	0.74	0.84	0.90
- · · A Product	0	0.92	1.55	1.86	1.95	2.26	2.35
·····B product	0	0.49	0.68	0.78	0.88	0.99	1.00

- \square A is a silane based oligomer
- \square B is a silane based monomer