

RC GUARDEX WATERPROOF

(80m²/pailcan, 2 times dilution)

RC GUARDEX is a modified biochemical solutions based on silicates, and are designed for application to concrete to achieve long term water proofing and durability.

Mode of operation: All concrete contains an enormous amount of tiny pores and pockets that are highly effective transport system for water leakage. These leakage brings along pollution like acidic precipitation, chlorine and acids, which both individually and together weakens the concrete quality.

RC GUARDEX belongs to a new generation of environmentally friendly treatment for concrete and concrete products. The treatment penetrates actively and deeply into the concrete, and effectively stops the leakage, arm corrosion and calcium washout. RC GUARDEX brings down dusting, expels oil and grease remains, and is also a splendid primer for additional surface treatment. Further more, RC GUARDEX has a restraining effect on fungus, moss and growth of alga. RC GUARDEX prevents corrosion attack on steel reinforcement, as well as ensures the right PH-level in the concrete. This is very important to avoid deterioration.

Thanks to RC GUARDEX adjustment to material used in concrete, abilities like color, consistent and appearance will remain the same. The treatment will leave a clear and natural surface, without pellicle or film.

Treatment with RC GUARDEX is permanent, and do not require maintenance. Using this product is therefore highly cost effective.

Area of use: Areas that are typical are foundation concrete, basements, terraces, walls, floors and roofs. RC GUARDEX has also been used in silos and disposal pits, bridges and tunnels with equal excellent results. Typical problem areas are most often water penetration. However, by treating with RC GUARDEX, attachment difficulties for paint and glue caused by salt, sooting and dusting will also be solved.

Preparation and direction of use: The surface must be free of dust, old paint or other incrustation that may obstruct penetration. Defect concrete/larger cracks must be professionally prepared in advance. Adjacent polished surfaces(e.g. glass, aluminium, tiles, varnished surfaces) should be covered. Stir or shake the product.

Application: If the concrete surface is very dry or the temperature is above 20°C, moist the surfaces slightly with water avoiding pools. Apply RC GUARDEX with roll, brush or low-pressure sprayer. Apply enough to visually confirm solid wetting of the surface, but avoid pools and flow out. Cover range is 3-6 m² depending on the surface suction characteristics. If the surface attracts abnormal amount of humidity, an additonal coat may be necessary. To increase and speed up the sealing process, flush with water after 12 to 24 hours. To wash away possible secretion and consolidate maximum penetration, flush with water again after 48 hours.

Further secretion may appear later, however, this is not damaging and can be flushed away if required.

Do not apply RC GUARDEX if temperature is below 5°C or above 40°C.

Cleaning:

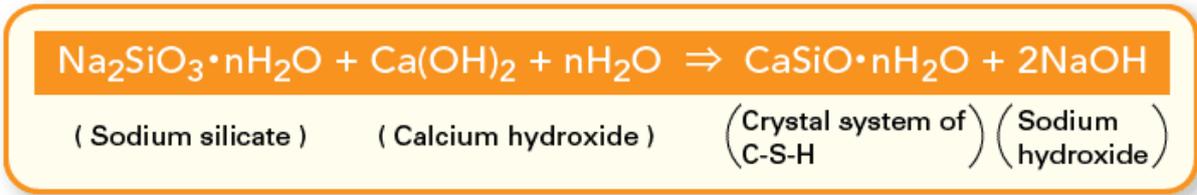
Tool: Water

Skin: Water and regular soap

Make sure of good ventilation and respiratory protection in sealed areas, due to mist that may irritate airways.

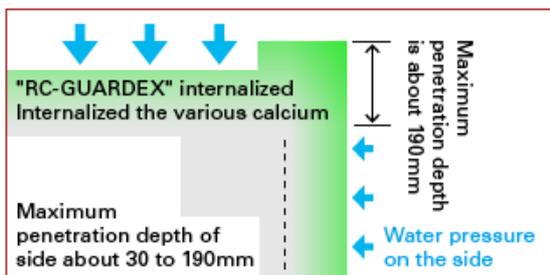
Chemical equation:

Bibliography : Japan Society of Civil Engineers (JSCE)

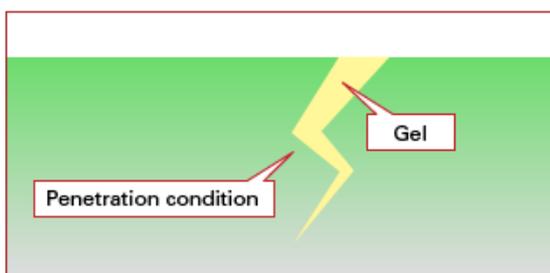


"Draft construction surface protection method" Source: Japan Society of Civil Engineers

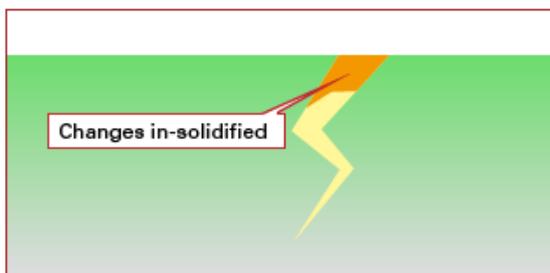
The basic principle of "Pervious concrete waterproofing material "



In the low-pressure sprinkling "RC-GUARDEX" is permeated in the concrete.

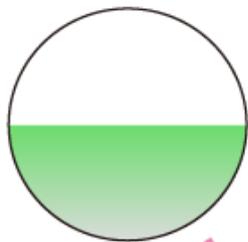


"isolated alkali" and "RC-GUARDEX" the reaction of gelation. Filling the cracks, even in the capillary pores uniformly penetrate the gel.



The top of the gel-filled "water" and "carbon dioxide" in response to that solidified. The same is the top of the capillary voids.

Self-repair effect by RC-GUARDEX



the crack-free place.

Forming a protective layer of concrete inside the waterproofing and prevent deterioration.



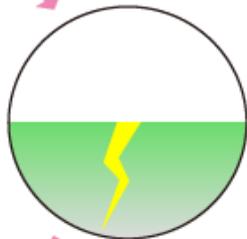
Cracking.

The reaction ranges up to 0.3mm the crack penetrated surface cracks will cover up to 0.8mm.



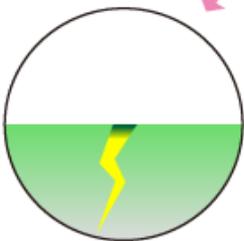
Rainwater penetration!

"RC-GUARDEX" interacts with various calcium and rainwater



Blocking the ingress of water!

Gel-like "RC-GUARDEX" fill in the cracks



Solidified form

Completely fill the crack to form a solidified

RC-GUARDEX (waterproof) construction procedures.

Repair the groundwork	<p>0.8mm and greater damage (as through-0.3mm) than does the repair of cracks in the mortar.</p> <p>Note: The RC and the other members and contact points please separate process.</p>
Care	<p>Steel sash, glass, railing, rain gutters, etc. to protect and cover sheet.</p> <p>Note: is applied to the tile surface, prior to the test construction, please check the color spots and efflorescence.</p>
Cleaning and washing, water spray the 1st	<p>Removing dirt and brush coated surface low-pressure washing equipment and pressure washers to prevent the drying and cleaning, "RC-GUARDEX" will lead to penetration.</p>
1st "RC-GUARDEX" application	<p>"1 stock solution: 1 water" evenly applied using a sprayer or roller or brush, etc. and then diluted (dilution: 0.15 liter / m²)</p> <p>About one hour after application, please leave.</p> <p>Note: Please dilute the stock solution and stir.</p>
2nd watering moist curing	<p>Be cured in about sticky little hands touch. When rapid drying is watering to keep them moist as needed.</p>
2nd "RC-GUARDEX" application	<p>"1 stock solution: 1 water" evenly applied using a sprayer or roller or brush, etc. and then diluted (dilution: 0.15 liter / m²)</p> <p>About one hour after application, please leave.</p> <p>Note: Please dilute the stock solution and stir.</p>
3rd watering moist curing	<p>Be cured in about sticky little hands touch. When rapid drying is watering to keep them moist as needed.</p>
Cleaning and finishing remaining materials	<p>Sprinkle enough water remained in the brush coated surface, etc. "RC-GUARDEX" to remove. Is desirable there is no sense of slime on the surface at this time.</p>
Last check	<p>After completion of construction, immediately "RC-GUARDEX" by adhering dirt is washed with water, then remove the curing compound construction is completed.</p>



1st watering



1st "RC-GUARDEX" application



2nd watering



2nd "RC-GUARDEX" application



3rd watering



Completed

Note: "RC-GUARDEX" is not dangerous, but it is strongly alkaline, and the case of eye contact with skin, please wash immediately with water. Then even if painful, please obtain medical attention.

RC GUARDEX WATERPROOF

1, IDENTIFICATION OF THE PREPARATION AND THE COMPANY:

PRODUCT NAME: RC GUARDEX
SUPPLIER: JAPAN NIHON KIUTAI SYORI LTD

2, COMPOSITION / INFORMATION ON INGREDIENTS:

COMPONENT:	CONTENTS:	CAS NO.:	HEALTH:
SODIUM SILICATE	10.0 ~ 16.0 %	7631-86-9	xi
SODIUM OXIDE	2.8 ~ 4.0 %	12401-86-4	xi
POTASSIUM OXIDE	1.0 ~1.4 %	12136-45-7	xi
WATER	78.0 ~ 86.0 %	7732-18-5	N/A
ORGANIC COMPOUND	proprietary		N/A

3, HAZARD IDENTIFICATIONS:

NONE

4, FIRST AID MEASURES:

EYE: RINSE THE EYE WITH COOL WATER FOR AT LEAST 15 MINUTES.
BE SURE TO REMOVE CONTACT LENSES IF PRESENT. GET MEDICAL
ATTENTION IF IRRITATION PERSISTS.

SKIN: MINIMAL EFFECT. RINSE SKIN WITH WATER. REMOVE CONTAMINATED
CLOTHING AND SHOES AND RINSE WITH WATER.

SWALLOWED: THIS PRODUCT IS NON-TOXIC. GIVE WATER TO DILUTE AND CONTACT A PHISICIAN
IF STOMACH UPSET PERSISTS. NEVER MAKE AN UNCONSIIOUS PERSON VOMIT OR
DRINK FLUID.

5, FIRE AND EXPLOSION INFORMATION:

FLASH POINT: NONE

EXTINGUISHING MEDIA: NO SPECIAL REQUIREMENTS. NON-FLAMMABLE AND NON-EXPLOSIVE.

UNUSUAL FIRE & EXPLOSION HAZARDS: SUBSTANCE OR PREPARATION IS NOT COMBUSTIBLE.

SPECIAL FIRE & EXPLOSION HAZARDS: NONE

6, SPILL AND DISPOSAL PROCEDURES:

PRECAUTIONS: WEAR SUITABLE PROTECTIVE CLOTHING. TAKE UP WITH SAND OR OTHER NON COMBUSTIBLE ABSORBENT MATERIAL AND PLACE INTO CONTAINER FOR LATER DISPOSAL. FLUSH SPILL AREA WITH WATER.

DISPOSAL PROCEDURE: DISPOSE IN ACCORDANCE WITH ALL APPLICABLE LOCAL ENVIRONMENTAL REGULATIONS.

7, HANDLING AND STORAGE:

TEMPERATURE: NO RESTRICTIONS. THIS PRODUCT CAN REVERSIBLY FREEZE AND THAW. STIR THOROUGHLY BEFORE USE IF PRODUCT HAVE BEEN EXPOSED TO FROST.

STRAGE CONTAINERS AVOID ALUMINIUM, LED, ZINC, TIN OR ALLOYS FROM THESE MATERIALS.

SPECIAL PRECAUTIONS: KEEP CONTAINER TIGHTLY CLOSED. SUITABLE FOR ANY GENERAL CHEMICAL STRAGE AREA.

8, EXPOSURE CONTROL AND PROTECTIVE EQUIPMENT:

VENTILATION: USE ADEQUATE GENERAL OR LOCAL EXHAUST VENTILATION TO KEEP VAPOR AND MIST LEVELS AS LOW AS POSSIBLE.

RESPIRATORY: NON REQUIRED WHERE ADEQUATE VENTILATION CONDITIONS EXIST.
PROTECTION: IF AIRBORNE CONCENTRATION IS HIGH, USE AN APPROPRIATE RESPIRATOR OR DUST MASK.

EYE/SKIN PROTECTIONS: SAFETY GOGGLES, UNIFORM, APRON, RUBBER GLOVES ARE RECOMMENDED.

HYGIENIC WORK ROUTINES: WASH PROMPTLY IF SKIN BECOMES WET OR CONTAMINATED. PROMPTLY REMOVE ANY CLOTHING THAT BECOMES WET. USE APPROPRIATE HAND LOTION TO PREVENT DEFATTING OR CRACKING OF SKIN.

9, PHYSICAL & CHEMICAL PROPERTIES:

APPEARANCE:	FLUID
COLOR:	COLORLESS
ODOUR:	ODOURLESS OR SLIGHTLY SOAPY
SOLUBILITY DESCRIPTION:	VARY SOLUBLE IN WATER
SOLUBILITY VALUE(g/100g H ₂ O 20°C):	350
BOILING POINT(°C, interval):	100
DENSITY/SPECIFIC GRAVITY(g/ml):	1.08 ~ 1.18/20°C
VAPOUR PRESSURE:	0.00025-0.0001 Pa/999°C
PH VALUE, CONC. SOLUTION:	11.3 ~ 11.9
VISCOSITY(INTERVAL):	1-5 CPS/20°C

10, STABILITY & REACTIVITY DATA

STABILITY:	NORMALLY STABLE
HAZARDOUS POLYMERIZATION:	WILL NOT OCCUR
MATERIALS TO AVOID:	ALLUMINIUM, LED, ZINC, TIN OR ALLYS FROM THESE MATERIALS

11, TOXICOLOGICAL INFORMATION

TOXIC DOSE - LD 50:	>2000.00mg/kg(oral rat)
HEALTH WARNINGS:	IRRITATING PROPERTIES REPRESENTS THE MAIN HAZARD.
EYE CONTACT:	IRRITATING
SKIN CONTACT:	IRRITATING
SWALLOWED:	MAY CAUSE INTERNAL INJURY
ROUTE OF ENTRY:	NON INDICATED
TARGET ORGANS:	NONE INDICATED
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:	NONE IDENTIFIED

