

DENKA CHLORE FIX GV

Chloride-fixing Non-Shrink Grout

Description

DENKA CHLORE FIX GV is a premixed, non-shrink grout that immobilizes chloride ions to minimize damage in steel-reinforced concrete structures; remarkably improving their durability especially where the structures are susceptible to salt damage.

Features

- Immobilizes chloride ions that cause rebar corrosion; greatly enhancing durability
- Bonds well with existing concrete structures, preventing any gaps that lead to bleeding
- Minimizes sedimentation and shrinkage by virtue of moderate expansivity and non-shrinkage
- Prevents cracking due to minimal drying shrinkage
- Stable quality; requiring only mixing with water on-site to produce mortar with excellent properties
- Accelerated rebar corrosion tests

Photos below show the corrosion status of test specimens after 1 year.



Plain concrete
: Corrosion present

With **CHLORE FIX GV**
: No corrosion observed

Applications

- Grout construction work at sites such as piers
- Steel-reinforced concrete structures damaged by salt

Packaging and General Information

- 25kg paper bags
- Appearance: Pale cement-gray
- Recommended usage temperature: 5~35°C
- Recommended standard water mix ratio: W/**CHLORE FIX GV** = 3.9kg/bag (3.5~4.3kg/bag)

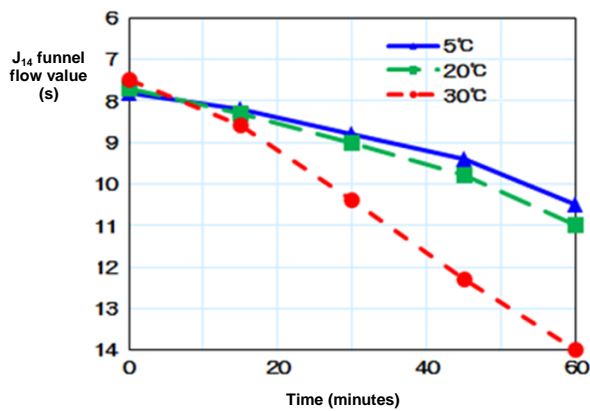
Standard Mix Proportions

	Target J_{14} flow value	CHLORE FIX GV (kg)	Water ¹ (kg)	Final mix volume (l)
Per bag	8 ± 2	25	3.9	13.3
Per m ³		1875	293	1000

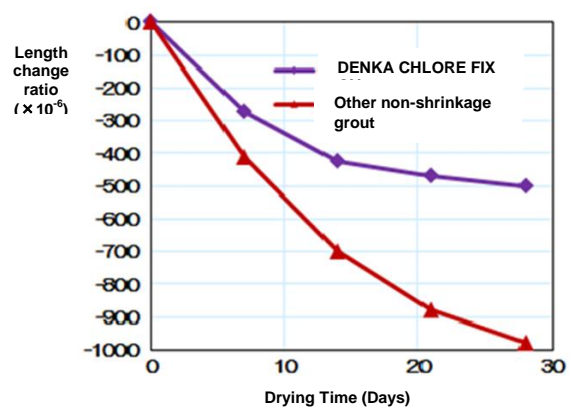
¹As the actual amount of water required is dependent on material temperature, ambient temperature, mixer structure etc., conduct trial tests beforehand to verify the optimum amount of water to use.

Technical Data (Arbitrary Values)

• Fluidity



• Drying shrinkage



• General physical properties

Curing temp. (°C)	Water amount (kg/bag)	Bleeding ratio (%)	Expansion ratio (%)	Setting time		Compressive strength (N/mm ²)			
				Initial	Final	Day 1	Day 2	Day 3	Day 4
5	4.1	0.00	0.11	20h 20min	27h 15min	1.00	12.5	26.6	43.8
20	3.9	0.00	0.23	7h 30min	9h 20min	15.6	30.8	43.6	57.0
30	3.8	0.00	0.26	5h 25min	6h 35min	21.5	36.8	50.3	56.0

• Salt shielding

Type	Chloride penetration depth (mm)	
	Day 28	
CHLORE FIX GV	4.4	
Plain concrete	10.0	

*Concrete properties: Nominal strength= 24N/mm², W/C= 55%, s/a=45%, C=320kg/m³

Handling Precautions

- Refer to the Safety Data Sheet (SDS) before use.
- Use clean water free from oils, salts, or organic compounds.
- Use a specialized high speed mixer to mix mortar at above 900rpm. Ensure that the mixer blade is either stainless steel or iron. Do not use an aluminum blade because hydrogen gas evolution can occur while mixing the mortar; resulting in explosions.
- Wear protective gear (goggles, mask, gloves, and rubber boots) while handling the product. Do not dispose of the product in drains.
- Use only the recommended water amounts during mixing to ensure optimum mortar conditions.
- During grout application, fill grout continuously into desired space until overfill to avoid air pockets or voids within the grout.
- Once grout is completely applied, keep it away from direct sunlight or wind and ensure that the grout is constantly moist during curing.
- Once opened, the product should be used up completely within the same day as it is highly hygroscopic.
- The product should be stored in a dry area, indoors, and out of direct sunlight.
- For further information, please contact DENKA.

Limitation of Liability

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