GENESIS (Silicate-Free Admixture)

INTEGRAL PERMANENT WATERPROOFING

Technical Data Sheet

DESCRIPTION

Genesis is a ready to use, liquid concrete waterproofing admixture containing a blend of organic and inorganic chemicals for replacing externally applied treatments to protect concrete structures against moisture transmission. Genesis is added to the concrete mix at the batch plant or can be added on site. Genesis generates non-soluble mineral formations and insoluble membranes in pores, capillaries and micro-cracks becoming an integral component within the concrete.

ADVANTAGES

- Improves freeze/thaw resistance
- Keeps concrete from dusting
- Inhibits rusting of metal reinforcing bar
- Offers faster finishing time
- Reduces shrinkage cracks
- Chloride, nitrate and sodium free
- Prevents capillary action
- Stops water, salt and alkali intrusion
- Resistant to chemical and acid-attack
- Helps reduce radon gas
- Can be used in stained and colored concrete
- Reduces Alkali-Silica-Reactivity (ASR)
- Compatible with adhesives, coatings and paints

APPLICATIONS

Genesis is a concrete admixture to eliminate moisture problems, reduce curling, retain water within the concrete for curing, reduce moisture vapor emission rate and permanently block water penetration from any direction.

TECHNICAL

Genesis is environmentally safe and less than 5 grams/Liter VOC.

Appearance: Milky Off-White
Flammability: None
Shelf Life: 1 Year
Weight: 8 lbs. 15 oz. / gallon
Storage Temperature: Above 45OF (8OC)
Solvent: Water
Hazardous Vapor: None
Installation: All Grade Levels

ASTM	METHOD	RESULTS
E96	Vapor Permeability	2.16 Perms 65 Percent Reduction
D5084	Hydrostatic Permeability	1.04 X 10 -8 cm/sec
C1567	Alkali-Silica Reactivity	-0.010 Percent (Control +0.024%)
C39	Compressive Strength	119 Percent of Control
C78	Flexural Strength	110 Percent of Control
C157	Drying Shrinkage	20 Percent Reduction
F1869	Calcium Chloride - 14 Days	3.53 pounds/1000 ft2/24 hrs.

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LIMITATIONS

A Concure Systems representative should be present at the jobsite during mixing and placement of the first batch of treated concrete.
Use non-chloride additives such as accelerators, plasticizers and water reducers with Genesis. Retarders may be used when ambient temperatures exceed 75°F (24°C).
Use Genesis in place of a portion of the mix water. A water-to-cement ratio (w/c) of .45 or less is critical to performance. Plasticizer and/or water reducing admixtures are recommended to achieve greater than 4" (100 mm) slump.
Store above 45°F (8°C) or separation may occur requiring thorough agitation. Do not allow to freeze.

PACKAGING

275 Gallon Totes
55 Gallon Drums
5 Gallon Pails

PRECAUTIONS

Store and handle Genesis according to Concure System's recommendations. Genesis should be used in mix designs not exceeding .45 w/c and not exceeding 4" (100 mm) without use of a water reducing or plasticizing admixture. Follow the manufacturer's instructions for dispensing. Genesis is added directly to the concrete mix design.

MIXING AND APPLICATION

Genesis is added at the batch plant or at the job site at a rate of 14 ounces (397g) per 100 pounds of cement. Additional dosage may be required for earlier permeability reduction.

TRUCK OR PLANT MIXING:
The dosage accuracy of any admixture should be within plus or minus 3%.

Two or more admixtures may be used in the same concrete batch, provided admixtures are added separately and that the combination has no deleterious effect on the concrete. After Genesis addition, rotate drum for 7 minutes, RAPID MIXING, before dispensing concrete.

ON-SITE MIXING:
Add the Genesis to the concrete truck and let drum rotate for 7 minutes, RAPID MIXING, before dispensing concrete.

LIMITED WARRANTIES

Extended Warranties are available. Written extended warranties are available on a per job basis.

If an extended warranty is required, the following items must be supplied to Concure Systems –

D-Scope meeting should be scheduled prior to the pour to discuss the following –

1. Mix Design
2. Batch Plant quality control testing
3. Concrete Contractor participation in finishing and curing
4. Submission of all materials to be used on sealed concrete surface
5. GC acknowledgements

Please call for further information

Testing of concrete slab for floor covering after HVAC system is on for 3 days a non destructive electronic moisture meter can be used to determine the dryness of the slab.

DISCLAIMER:

To the best of our knowledge the technical data contained herein is true and accurate on the date of publication and is subject to substitution due to supply change shortages without prior notice. Please contact Concure Systems to confirm most up to date product information.