

Product Data Sheet

Edition November 2017

CWPA

ISE LOGIK INDUSTRIES CWPA 800

Concrete Water Proofing Admixture (CWPA)

Description

CWPA 800 is a non-toxic, volatile organic compound (VOC) free, liquid admixture formulated to react with the hydroxide ions produced by the cement hydration process. In doing so, CWPA 800 creates additional hydration products within the capillary pores and blocks them, effectively shutting down moisture vapor movement through the concrete. *Manufactured with deionized* water to remove trace mineral ions and containing no chloride based materials, CWPA 800 will not promote nor contribute to corrosion of embedded or reinforcing steel.

Use

CWPA 800 has been specifically formulated for use in normal and light weight concrete mixes to produce low permeability concrete across a wide spectrum of mix designs. Typical uses of CWPA 800 include but are not limited to:

- Elevator pits and retaining walls
- Water retaining structures such as swimming pools and cisterns
- Foundations
- Walls
- Footings and other underground structures
- Civil engineering projects of any magnitude

CWPA 800 has no w/cm range limitation. ISE LOGIK Industries would be happy to participate in your testing of the desired project mix to determine if CWPA 800 can achieve the desired concrete properties.

Benefits

Each manufactured lot of CWPA 800 is produced under some of the most exacting chemical manufacturing processes available. CWPA 800 has been proven to significantly enhance the physical properties of ready-mixed concrete through extensive independent testing.

- Reduced Permeability (per ASTM D5084):
 - 98% less permeable as compared to non-treated specimen
 - Protects against alkali and efflorescence attack from the concrete
 - Inhibits corrosion due to decreased permeability of concrete
- Mitigating Effect on ASR (per ASTM C1260):
 - 10% reduction of effects of ASR compared undosed control
- Mitigating Effect on Shrinkage (per ASTM C157):
 - 10% shrinkage reduction by day 28 from casting of specimen
 - Reduces slab warp, plastic shrinkage cracking and crazing
- Rapid Strength Gain (per ASTM C39/39M):
 - Achieves design strength in as little as three days after casing of specimen due to internal curing
 - No thermal cracking
- Type S Admixture (per ASTM C494/C494M)
 - Full compliance with published requirements
- Completely blocked water migration through hardened concrete
 - Per CRD C48-92

Packaging

CWPA 800 is available in the following quantities:

- 55 gallon drums (208.2 liters)
- 275 gallon totes (1040.99 liters)
- Bulk delivery available upon request (volume dependent)



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Dosage

For normal and lightweight mix designs between 0.40 and 0.54 w/cm:

- 16 ounces (474 ml) per 100 pounds (45.36 kg) of total cementitious material
- Do not replace mix water with CWPA 800; CWPA 800 is used in addition to the mix water

Consult directly with manufacturer on all mix designs outside this published range.

Mixing

CWPA 800 can be added at the batch plant or at the project site. For best results, CWPA 800 should be added directly to freshly mixed concrete at the end of the batch process with the tail water.

- Mix thoroughly to insure uniform distribution of CWPA 800
- Rapid drum rotation for a minimum of seven (7) minutes is recommended
- Compatible with fly ash and granulated ground blast furnace slag
- Compatible with all other chemical admixtures
- Compatible with steel or mesh fibers
- Does not promote corrosion of embedded reinforcement

Placement

CWPA 800 has little to no impact on concrete set times when compared to equivalent mix designs without the CWPA 800 admixture.

- Use of surface applied evaporation retarders as necessary for ambient conditions does not negatively impact the CWPA 800 dosed concrete.
- Any ACI accepted method for curing concrete is completely acceptable for curing concrete with CWPA 800. Due to the internal curing properties of the CWPA 800 admixture, the curing time with moisture retaining covers can usually be reduced by up to 50%, depending on ambient conditions.

Storage

Store CWPA 800 above 32° Fahrenheit (0° Celsius) and never allow to freeze. Should product freeze, return to manufacturer for reincorporation at purchaser's shipping expense. Do not store in direct sunlight for long periods nor in unopened containers. CWPA 800 is a water-based admixture and significant evaporation could occur if not protected from excessive heat or sunlight. CWPA 800 has no shelf-life if stored properly in original, unopened packaging material. However, it is recommended that all product be used within one year of purchase for best results.

Technical Data

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| • Physical state | – liquid |
| • Odor | – odorless |
| • Color | – hazy whitish liquid |
| • Freezing point | – 32° F (0°C) |
| • Boiling point | – 212° F (100°C) |
| • Volatile Organic Compounds (VOCs) | – 0 g/l |

ISE Logik Industries warrants its CWPA 800 product to be free from manufacturing defects and will be consistent with ISE Logik Industries' normal quality and manufacturing specifications. ISE Logik Industries agrees to replace with a normal quality or, at its option, refund the purchase price of any material sold that is either proven defective or fails to be consistent with ISE Logik Industries' normal manufacturing specifications, provided the material has been stored and applied in accordance with the Manufacturer's written instructions. The Manufacturer shall not be liable for any direct, indirect or consequential cost, loss or damage however incurred or caused, included but not limited to damages for personal injury or death, damage to property or loss of profits. This warranty is void if the CWPA 800 product is improperly stored, is allowed to freeze, is improperly utilized, and expires within five (5) years of the project's substantial completion.

