



NewLook International, Inc. EFFLOCK™ Permanent Efflorescence Curing Additive

Technical Information Sheet

NewLook's EFFLOCK™ is a unique admixture that prevents and completely eliminates both primary and secondary efflorescence in concrete and masonry mixtures. Efflorescence occurs when moisture in concrete and masonry migrate to the surface carrying salt minerals that react with air to create calcium carbonate. This white chalky deposit can be very unsightly and difficult to remove. Unlike other admixtures that try to reduce efflorescence by slowing water intrusion, EFFLOCK's nano-fusion chemistry actually uses the presence of water to react with and bind minerals, chlorides, salts deposits and other impurities of concrete mixes at the nano-molecular level. It converts these into harmless matter that becomes part of the concrete. EFFLOCK is guaranteed* to completely and permanently prevent efflorescence when used properly. It is specifically formulated for cement and mortar mixers. This keeps efflorescence from leaching out onto brick, block and other mortar set products permanently; it is also excellent for pre-cast and poured-in-place concrete.

CHEMISTRY: NewLook's EFFLOCK™ is a chemically engineered water-based solution containing nano-binding composites that react with impurities such as calcium and mineral based salt that can be found in mortar mixes, cement products and aggregates. This reaction binds these impurities permanently and prevents efflorescence salt from leaching out to the surface. The nanotechnology of EFFLOCK's chemistry is approximately 100,000 times smaller than even the smallest cement particle. This allows it to literally pass through cement minerals or (hollow) sand and become part of the mineral it reacts with. EFFLOCK reacts when hydrogen is present; it stops reacting when the concrete mix dries, but will react again when the concrete gets wet further improving the ability to lock out the efflorescence.

USES AND BENEFITS

- Cures primary and secondary efflorescence permanently
- Increases density and green strength of concrete
- More efficient and cleaner curing process helps bind impurities resulting in brighter more stable integral colors
- Potential to reduce integral pigment loading due to improved color result
- Helps improve the reaction of densifiers and penetrating sealers by binding away the salts and contaminants that inhibit penetration and efficient reaction
- Improves the long-term bonding of paint and sealers that are often compromised with an inefficient cure or leaching of efflorescence
- Extends set time resulting in greater strength
- Helps improve the curing process and results in improved cosmetic appearance with fewer air pockets and pinholes
- Provides excellent water and moisture screen
- Available in Liquid or Powder
- May be used with all cement types including lime, calcium, alpha and beta gypsum, fly ash, volcanic ash and hydraulic cement
- Very eco-friendly; no Volatile Organic Compounds (VOC's)

PRIMARY APPLICATIONS

- Concrete, masonry, brick, block, stone, stucco, poured-in-place, pre-cast and any other cementations products
- Great for use in virtually all concrete mixes
- Recommended to be incorporated by ready-mix plants, architectural block, concrete roof tile and paver manufacturers, makers of integral pigments, and other specialty mortar, micro-topping and overlay manufacturers

MIX RATIOS

LIQUID

- 6 – 8 oz (178 to 236 ml) Liquid per 100 lbs. (45 Kilos) of cement for a 3:1 sand/cement ratio
- 8 – 10 oz (236 ml to 296 ml) Liquid per 100 lbs. (45 Kilos) of cement for a 5:1 sand/cement ratio

POWDER

- 3 – 4 oz (89 to 118 ml) Powder per 100 lbs. (45 Kilos) of cement for a 3:1 sand/cement ratio
- 4 – 5 oz. (118 ml to 148 ml) Powder per 100 lbs. (45 Kilos) of cement for a 5:1 sand/cement ratio
- Powder may be added to the dry mix. A thorough mixing is required to yield the guaranteed result

** Note** Mix ratios are approximates and may vary due to the mix and aggregates used. Certain mixes vary in salt and contaminant content. Generally, for more problematic mixes no more than 14 oz per 100 lbs. of cement is necessary.

PRECAUTIONS

- DO NOT mix any other additives or plasticizer into the EFFLOCK. Add them separately in sequence, if needed. Allow minimum of five minutes mixing time per each sequence.
- EFFLOCK must come into contact with the entire mix in order to maximize benefit. As such, mixing in with water will yield the best result
- Some operations may require adding the EFFLOCK separate from water. A patch test is recommended to assure proper mix ratio and order of addition
- For general practice, it is not recommended that plasticizer be use with EFFLOCK. However, plasticizer may be used, but it is critical to mix in the EFFLOCK with water first as to allow it to react with the cement mix before the plasticizer or other resin type admix coats over the mix particles.

ASTM TEST DATA

Complies with

- ASTM C-33 Normal Weight Aggregates
- ASTM C-150 For Portland Cement
- ASTM C-55 Grade N Concrete Brick
- ASTM C-145 Grade N Solid Load Bearing Unit
- ASTM C-90 Grade N Hollow Load Bearing Unit
- ASTM C-494/494M For Hydraulic Cement

UNIT SIZES

- 16 oz (472 ml) Liquid Sample Bottle
- 1 gallon (3.78 liters) Liquid
- 5 gallon (18.72 liters) - Liquid
- 55 gallon (208 liters) Drum or
- 275 gallon (1040 liter) Liquid Totes
- EFFLOCK Powder available upon request for bulk users. Contact NewLook for more information.

SAFETY & HANDLING

- Handling: Rubber gloves and safety glasses
- Storage: Best if stored at room temperature between 40°F (4°C) and 105°F (40°C)
- Not classified as hazardous; safe to ship by ground, ocean, or air.
- Shelf-Life: 18-months for Liquid, 24-months for Powder

**** KEEP OUT OF REACH OF CHILDREN****

*GUARANTEE

EFFLOCK is guaranteed by NewLook International Inc. to prevent primary and secondary efflorescence for the life** of the concrete! The following guarantee is made in lieu of all other warranties, either expressed or implied. This product is manufactured of selected raw materials by skilled technicians. Neither seller nor manufacturer has any knowledge or control concerning the purchaser's use. The only obligation of either seller or manufacturer shall be at manufacturers' discretion 1) to replace any quantity of this product, 2) to provide up to similar value of EFFLOCK topical solution to further stop efflorescence or 3) refund purchase value or offer manufacturer credit toward future purchases. The redemption of such guarantee will require proper documentation and proof of mix designed used and mixing information including use of other additives and sequence of additions. EFFLOCK is guaranteed to produce the results when sufficient product is mixed thoroughly as to allow for the material to come into contact with the entire mix. This is guaranteed when proof is presented that the EFFLOCK was mixed well with water into the mix and following best practices as outlined by the manufacturer. Any claim of defective product must be received in writing within **twenty years from date of shipment with proof of purchase and batch number of the product used. (Any primary or secondary efflorescence problems will generally appear within the first year.)Neither seller nor manufacturer assumes any liability for injury, loss, or damage resulting from use of this product.

NEWLOOK INTERNATIONAL, INC. PRODUCTS available through: