

EFS-8500 DENSIFIER TECHNICAL DATA SHEET

1. Product Description & Use: EFS-8500 Densifier is specially formulated for block and reduce vapor emission through concrete but leaves concrete and brick breathable. Also purges soluble chlorides and prevent re-entry. Cures and chemically hardens in one application. Penetration depends on density of concrete and masonry substrate. Does not alter bond ability. Economical. No flammable, cures, seals, hardens and dust-proofs freshly place concrete. This B17-233 is non-acid and internally strengthens and waterproofs and seals the substrate after all materials harmful to the brick and concrete are removed. This process could take up to thirty days or longer, depending on the chloride and acidic residual concentration with the capillaries. In condition where salt air and humidity attack the concrete, causing oxidation of the reinforcing steel, B17-233 has prevented to halt such corrosion activity. When applied to concrete exposed to such conditions, exfoliation or expulsion of the chloride takes place.

2. Features & Benefits:

• *Safe:* Formulated with no toxic chemicals including Acids, caustics, NMP, toxins and will not burn the skin.

• *Effective:* Fast acting while not damaging soft and fragile stone. Allows substrate to breath to ensure long-term effectiveness.

• *Environmentally Friendly:* Water based, its biodegradable, no TAP's, no HAPs.

• Simple: Easy to apply and easy to remove.

3. *Limitations:* For the best results, surface temperature should be $5^{\circ}C(40^{\circ}F) - 38^{\circ}C(100^{\circ}F)$. Product can be applied as low as $3^{\circ}C$

(37°F), however, efficiency and effectiveness are reduced, and dwell times are increased.

4. *Testing:* Always prepare a test area on each type of surface and coating prior to full application. Testing prior to starting your project is the best way to ensure product suitability.

Preparation: Cover/protect areas where you do not want the **EFS-8500** to get in contact with. Polyethylene (plastic sheets) and masking tape can create an effective barrier where over spray may reach. Plants and or any type of vegetation should be covered as well. *Caution:* Can affect vehicles, glass surfaces, plant life, aluminum, ceramics, glazed tile and wood.

5. Application Procedure & Spread Rate:

Cured Concrete:

Vertical Surface: Apply from the top to bottom to point of refusal. Apply **EFS-8500** in multi-coat application using a low pressure. After the first coat has soaked in, immediately apply the second coat. Apply as much materials as the surface will readily absorb. Areas that absorb densifier at fast rate will require additional coat.

Horizontal Surfaces: Avoid over-application and pudding. Excess un-reacted B17-233 will leave white crystals on concrete or brick. Brush or broom to more porous area. Successive application should be applied approximately 3-40 minutes apart until surface refuses product. Each application is to be applied so that a light wet sheen appears on the concrete or brick.

Final Step: Approximately 30-40 minutes after the last application of **Densifier**, two light coats of potable water, 30-40 apart, is to be applied to the surface. The water carries and locks in the uncured binder crystals into the concrete or brick.



<u>New Concrete:</u> Can be used to cure and seal newly placed concrete.

Method: Upon removal of forms or disappearance of bleed water and when concrete will not be marred by walking workmen, use a low-pressure sprayer with a fantip nozzle producing ½ gal/minute with 40spi, a brush or roller to apply a uniform film. Avoid in low area.

Vertical Surface: Apply from top to down using a low-pressure sprayer (40spi) with a fan-type nozzle or with a roller with a minimum 3/8" nap. Flood surface until excel runs down 6 to 8 inches below spray pattern. For maximum coverage, a second wet-on wet re-application within 20-40min is recommended.

Horizontal Surfaces: Apply a flood coat using sufficient materials so surface remains wet 3 to 5 minutes. A second wet-on-wet re-application with 2-40min is recommended for maximum coverage. CAUTION: Avoid over-application or ponding as may cause darkening of surface. Brush or broom to spread to more porous area.

SAFETY PRECAUTIONS: TO BE USED BY PROFESSIONALLY TRAINED PERSONNEL USING PROPER SAFTETY EQUIPMENT. USE ONLY WITH ADEQUATE VENTILATION. PLEASE REFER TO MATERIALS SAFETY DATA SHEET PROVIDED BY THE MANUFACTURE.

Clean Up: Clean up airless sprayer by running water or soapy water through the equipment soon after application has been completed. Allow surface to dry thoroughly before repainting or applying any other coating. Dispose of any empty containers properly.

6. *Availability & Cost:* The EFS-8500 is available at Molecular Tech Coating Inc.

7. *Maintenance:* No other service is required after project is finished.

8. *Health & Safety Requirements:* Not for internal consumption. While **EFS-8500** is formulated to be safe for the user, surface and

environment, proper safety procedures should be followed at all times. Refer to the Material Safety Data Sheet (MSDS) for important health and safety information and protocol. *Note: In case of contact with skin or eyes, wash well with water. If irritation continues seek medical attention. Keep out of reach of children.*

9. Warranty: Molecular Tech Coating **Inc.** warrants all of its products to be free from defects and makes no other warranties with respect to its products, express or implied, including without limitation of the implied warranties of MURCHANTABILITY OF FITNESS FOR PARTICULAR PURPOSE. Molecular Tech **Coting Inc.** liability shall be limited in all events to supplying sufficient products to re-treat the specific areas to which defective product have been applied. Molecular Tech Coating Inc. shall have no other liability, including liability for incidental, consequential or resultant damages whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of Molecular Tech Coating Inc. or its distributors, and dealers.

10. **Technical Services:** Molecular Tech Coating Inc.'s highly experienced staff is available to answer technical questions and provide product-specific information required by architects, specifiers, contractors and property owners. Expert on-site assistance is available at no additional cost. Call 1-604-616-2661

11. Technical Data

Color	Clear
Vapor pressure	20 mm Hg @ 20°C (As Water)
Coverage @ 1.0 mil	300 – 400 sq. ft./Gallon
Density	1.0 - 1.1 kg/l
PH Flash Point	9.5 - 11 >95°C
Viscosity VOC	16 sec Z#2 @ 20 °C 0 g/L