

TECHNICAL BULLETIN



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DEFEND (Sandstone/Limestone Consolidator)

MATERIAL & FUNCTION

Defend is a penetrating, invisible and breathable liquid that consolidates, hardens and binds the surface of porous and friable surfaces, particularly limestones and sandstones. It will assist in the prevention of salt attack and surface breakdown common around swimming pools. Defend is also useful on less porous surfaces such as tile, brick, natural stone, paving and grout. The treated surfaces are easier to clean and maintain. The performance of sealers used after Defend will be improved. Other sealers on the Environex range can be used over the top of Defend. Consult your Environex representative for assistance with the type of sealer needed to produce the desired finished effects.

University tests show the following typical averaged results on 4 different sandstones for the active ingredients used to manufacture Defend

On comparison of the material lost by untreated and treated samples after a series of the salt crystallisation cycles, it was observed that the magnitude of losses was reduced dramatically because of treatment with the consolidator with the same active materials as Defend

Material losses in Untreated and Treated sandstone samples after artificial weathering	Untreated sandstones	Treated with Defend active constituent
Average mass loss per unit area (g/m ²)	1679	160
Average open porosity before (%) all sandstone types	10.0	9.2
Average open porosity after (%) all sandstone	9.9	8.2

APPLICATION

ALWAYS TEST PRODUCT ON A SMALL AREA FIRST.

Ensure surfaces to be treated are dry, clean and free of residues.

Saturate the surface with product using a clean brush or a low-pressure hand spray. Avoid contact with surrounding areas.

After 10 minutes, repeat the process. Total application rate is approximately 3-5 square metres per litre but is totally dependent on surface porosity. This allows for 2 saturating coats on most surfaces.

Allow 10 minutes for product to penetrate surface then lightly dry surface with cloth to remove excess product.

Clean equipment with methylated spirits.

Avoid very hot or very cold surfaces. Do not apply on surfaces that are below 5 or above 35 degrees.

Avoid moisture contact with the surface for 24 hours after application.

Protect surrounding areas from over spray.

SAFETY

Read the Material Safety Data Sheet. Use only in well-ventilated areas.

Use a positive pressure respirator if ventilation is inadequate.

Wear suitable solvent-resistant gloves, protective clothing, safety goggles and an organic vapour respirator during application. Wash hands thoroughly.

PACKAGING

1, 4, 10 and 20 Litre containers

IMPORTANT NOTICE TO CUSTOMER

*Since the use of this product is beyond the control of either seller or manufacturer, their only obligation shall be to replace any quantity of product which is proven defective. They cannot assume any risk or liability in excess of the purchase price of the product itself, which does not include labour or any consequential damages resulting from the use of this product. Determining the suitability of this product for any intended use shall be solely the responsibility of the user. **ALWAYS TEST FIRST.***