

# Durex® Diamond Cure

## Concrete Densifier & Chemical Hardener

<b>Description</b>	Durex® Diamond Cure Concrete Densifier is a ready-to-use, sodium silicate densifier. Durex® Diamond Cure is a colourless and odourless sealer, formulated with chemically reactive raw materials to harden and dustproof concrete. Durex® Diamond Cure offers substantial improvement in abrasion and chemical resistance, and will significantly improve the durability of the concrete surface when compared to untreated concrete. When applied, it penetrates into the concrete surface and a chemical reaction takes place, producing a by-product that fills in the pores of the concrete. This process produces a substantially denser concrete surface with enhanced durability. In addition to this action, Durex® Diamond Cure also solidifies concrete.
<b>Uses</b>	Durex® Diamond Cure is recommended for use wherever hardened, dustproofed and improved chemical and abrasion-resistant surfaces are required (both interior and exterior surfaces). Durex® Diamond Cure is to be used on horizontal concrete surfaces subject to moderate abrasion.
<b>Ideal For</b>	<ul style="list-style-type: none"> <li>. Industrial plants</li> <li>. Warehouses and storage silos</li> <li>. Sewage plants and chemical processing facilities</li> <li>. Civic centres, sports arenas and stadiums</li> <li>. Institutional &amp; Office Buildings</li> <li>. Parking Structures</li> <li>. Museums</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>. Zero VOCs</li> <li>. Penetrates deeply into concrete to densify and harden surfaces to help prevent entry of moisture and other foreign matter</li> <li>. Reduces dust and improves chemical, petroleum and abrasion resistance of treated surfaces</li> <li>. Provides a permanent, attractive sheen when polished</li> <li>. Provides tough, protected surface that will not yellow, discolour or show pedestrian or vehicular traffic wear marks</li> <li>. Improves light reflectance</li> <li>. Ready to use and easy to apply</li> </ul>

### TECHNICAL DATA

#### PHYSICAL PROPERTIES

<b>Colour</b>	Please see <i>Durex® Colour Selection Guide</i> for available colour options.	
<b>Resin Type</b>	Silicates mixtures	
<b>Coverage</b>	New concrete: 6.1 m <sup>2</sup> /L (250 ft <sup>2</sup> /gal) Old concrete: 4.3 m <sup>2</sup> /L (175 ft <sup>2</sup> /gal)	
<b>Cure Time</b>	4 hours <i>* Note:</i> This product dries very quickly on new, virgin concrete. Drying times may be extended on existing concrete due to surface conditions. Restrict foot traffic for at least 4 hours. 12 hours is preferable.	

#### PERFORMANCE PROPERTIES

PERFORMANCE PROPERTIES	TEST METHOD	RESULTS
<b>Percent Solids</b>	ASTM D7232-06	60% (vol.)
<b>V.O.C.</b>	ASTM D3960-05	0 g/L
<b>Specific Gravity</b>	ASTM D333	1.3-1.5 ±- 0.2 g/L

<b>Packaging</b>	Durex® Diamond Cure is packaged in 18.9 L (5 gal) pails. This product is available in clear.
<b>Storage Conditions</b>	Store Durex® Diamond Cure in a dry, vented, waterproof location, stacked off the ground, out of direct sunlight and other detrimental conditions. Store liquid materials in ambient temperatures above 5 degrees C and below 35 degrees C. <b>KEEP FROM FREEZING.</b>
<b>Surface Preparation</b>	Surface should be clean and structurally sound. Remove all residues, curing compounds, oils, sealers, contaminants and laitance before applying Durex® Diamond Cure. Fill and repair all holes, cracks and deteriorated areas that have been removed to sound concrete. On newly placed concrete, Durex® Diamond Cure can be applied after 3 to 7 days, but is recommend to wait at least 7 to 14 days prior to application.
<b>Mixing Instructions</b>	Durex® Diamond Cure is sold ready to use. For optimum performance, gentle mixing or agitation is recommended.
<b>Application</b>	<p><b>Fresh Concrete:</b> Apply undiluted Durex® Diamond Cure at approximately 6.1 m<sup>2</sup>/L (250 ft<sup>2</sup>/gal) using a low-pressure sprayer or by spreading evenly with a soft-bristled broom. Do not allow material to puddle on the surface. No further application steps are required for fresh concrete.</p> <p><b>Existing Concrete:</b> Saturate the surface with undiluted Durex® Diamond Cure by sprayer, squeegee or broom. Keep the surface wet with Durex® Diamond Cure for a minimum of 30 minutes (a range of 30 to 60 minutes may be required depending on temperature and conditions).</p> <p><b>Note:</b> Particular attention should be paid to porous and/or dry areas. These areas must be kept wet at all times with Durex® Diamond Cure. Once the surface begins to gel and becomes slippery, immediately spray the surface with a light water mist. Scrub the surface with a broom or mechanical scrubber to increase the penetration of Durex® Diamond Cure. Continue to work the product into the surface for another 5 to 10 minutes or until it becomes gelled and slippery for a second time. At this time, thoroughly flush the surface with water. During the flushing process, agitate the surface with a broom to aid in removal of excess product. Remove all excess material with a mop or squeegee. Thoroughly squeegee the surface dry. If there are any slippery patches, this is an indication that there is still excess product present. These areas should be re-flushed and re-applied again until the entire surface is dry (extremely porous surfaces may require a second application).</p> <p><b>WARNING:</b> Failure to thoroughly wash and remove all excess material from floor surfaces may result in unsightly white stains. Immediately wash off over-spray from glass, aluminum or highly polished surfaces with water to avoid etching of surfaces. Durex® Diamond Cure can be burnished to a high sheen on steel trowel concrete floors. A high-speed burnisher (2,000-2,200 rpm) with appropriate maintenance pad is needed.</p>
<b>Limitations</b>	Do not apply Durex® Diamond Cure if the temperature of the concrete is less than 5 degrees C or above 35 degrees C.
<b>Clean-Up</b>	Wash all tools and equipment immediately after use with mineral spirits.
<b>Health and Safety</b>	Take suitable fire precautions. Use under well-ventilated conditions with appropriate respirator approved for organic vapours and rubber gloves when handling the product. Avoid contact with eyes and prolonged contact with skin. If contact occurs, flush immediately with water and seek medical attention if irritation occurs. Harmful if swallowed. Do not induce vomiting. Drink 1-2 glasses of water or milk. Keep product out of reach of children. Read published Material Safety Data Sheet for additional information.
<b>Warranty</b>	Durabond warrants this product is free of manufacturing defects, and will replace at no charge, provided it has been applied within 12 months of purchase, it has been installed for uses suitable for this product and in accordance with the manufacturer's instructions.
<b>Technical Services</b>	Technical support is available upon request at <a href="mailto:info@durabond.com">info@durabond.com</a> . For the latest version of this data sheet, please visit our website at <a href="http://www.durabond.com">www.durabond.com</a> , call toll free at 1-877-DURABOND (387-2266) or speak with your Durabond Technical Coatings Ltd sales representative.

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