



**PRODUCT DATA SHEET**

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HEAVY-DUTY CONCRETE FLOOR FINISHING

# Sika® EmeriCrete® SH

## PREMIXED, NATURAL EMERY AGGREGATE SURFACE HARDENER

**Description** Sika® EmeriCrete® SH is a broadcast-applied surface hardener combining natural emery aggregates, cement and special wetting agents providing the most durable finish available using mineral aggregates. The high aluminum oxide (> 58 %) and iron oxide content of the emery particles provide toughness but avoid brittleness and hardness. Sika® EmeriCrete® SH is highly recommended for heavy-duty industrial surfaces and is blended to be incorporated into the surface of freshly placed concrete providing many more years of durability over non-hardened surfaces.

**Where to Use** Sika® EmeriCrete® SH is suitable for both interior and exterior use.  
Applications include:

- Foundries.
- Heavy manufacturing.
- Metal workshops.
- Petrochemical refineries.
- Processing plants.
- Waste and recycling facilities.
- Warehouses.
- Distribution facilities.
- Food distribution centres.
- Dairies.

**Advantages**

- Premixed and ready-to-use.
- High hardness.
- Highly resistant to impact and abrasion.
- Non-rusting.
- Anti-slip finish.
- Unaffected by intense heat - maximum 290 °C (554 °F).

<b>Technical Data</b>	
<b>Packaging</b>	25 kg (55 lb) bag
<b>Colour</b>	Natural Concrete Grey
<b>Yield</b>	
Medium duty	5 - 7 kg/m <sup>2</sup> (1 - 1.4 lb/ft <sup>2</sup> )
Heavy duty	8 - 9 kg/m <sup>2</sup> (1.6 - 1.8 lb/ft <sup>2</sup> )
<b>Shelf Life</b>	1 year in original, unopened packaging. Store dry, ensuring that product is not exposed to rain, condensation or high humidity.
<b>Application Temperature</b>	16 to 30 °C (61 to 86 °F)
<b>Properties at 23 °C (73 °F) and 50 % R.H.</b>	
<b>Compressive Strengths ASTM C109</b>	
<b>Based on 0.10 water:solids ratio</b>	
24 hrs	> 30 MPa (4350 psi)
7 days	> 56 MPa (8125 psi)
28 days	> 70 MPa (10 150 psi)
<b>Particle Shape</b>	Polyhedral
<b>Hardness (Moh's scale)</b>	8
<b>Specific Gravity ASTM C128</b>	3.9
<b>Soundness ASTM C88</b>	6.1% loss
<b>Chemical Analysis of Aggregate</b>	
Al <sub>2</sub> O <sub>3</sub>	≥ 58%
Fe <sub>2</sub> O <sub>3</sub>	≥ 24%
SiO <sub>2</sub>	4% - 8%
<i>Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.</i>	

<b>How to Use</b>	<p><b>Cold Weather:</b> Where required, space heaters must be properly vented to avoid floor surface damage caused by carbonation or contamination.</p> <p><b>Hot Weather:</b> Adjustments to application procedures may be required to offset rapid setting of the concrete surface before applying Sika® EmeriCrete® SH finishes. Contact your Sika Canada Representative for further information regarding hot weather installations.</p>
<b>Application</b>	<p>Sika® EmeriCrete® SH is applied to the surface in 2 or 3 broadcasts, each being floated using power equipment. The surface is then power-trowelled and hand-trowelled as required to a satisfactory finish. Apply the first broadcast of Sika® EmeriCrete® SH as soon as concrete is firm enough to support the weight of workmen and their equipment and no standing water is present on the surface. Use up to 2/3 of total material in the first application. Treat areas adjacent to walls and columns first. Spread the material evenly by broadcasting at right angles in two passes close to surface level. Do not broadcast from a stationary position to avoid non-uniform hardener distribution. Allow Sika® EmeriCrete® SH to absorb surface moisture. Float the broadcasted material promptly. Work wall, column and door areas first. Avoid excessive floating, but ensure the broadcast application is completely wetted and incorporated into the base slab. Follow immediately behind first floating, apply the remaining material and install as above. A third power floating may follow for added compaction, if required.</p> <p><b>Note 1:</b> If a coarse, non-slip finish is required, do not proceed with further floating or trowelling operations after second floating, but allow the surface to cure.</p> <p><b>Note 2:</b> For applications greater than 5 kg/m<sup>2</sup> (1 lb/ft<sup>2</sup>), apply hardener in 3 broadcasts. First application should be 50% of the total required material and 25% in each of the subsequent applications.</p> <p>Proceed with power trowelling as soon as the floor surface begins to lose moisture sheen, setting the trowel blades at a flat angle. As floor stiffens further, proceed with second trowelling with trowel angle raised. When a minimum amount of cement paste clings to the trowel edges, proceed with final trowelling. Eliminate trowel marks, pinholes or any other flaws.</p>
<b>Curing</b>	<p>As soon as final trowelling is completed and applicator and equipment cannot damage the surface, apply as per printed directions, one or more coats of Sika® Florseal WB-18 &amp; -25. Protect finished surface from damage by traffic or trades until sufficiently hardened.</p>
<b>Clean Up</b>	<p>Clean all tools and equipment promptly with water. Remove hardened product mechanically.</p>
<b>Limitations</b>	<ul style="list-style-type: none"> <li>▪ Important: protect stored material from exposure to rain, condensation and high humidity as moisture may penetrate packaging, causing lumps.</li> <li>▪ For best results, condition product to 18 to 29 °C (65 to 84 °F) prior to mixing and installation. Lower temperatures may result in slower strength development and longer cure times.</li> <li>▪ Not recommended for areas where exposure to oxidizing, mineral and organic acids is likely.</li> <li>▪ Certain admixtures such as Calcium Chloride and/or admixtures containing Calcium Chloride or high range water reducing admixtures should not be used in concrete on which hardeners are to be applied.</li> <li>▪ Do not apply over concrete containing more than 3 % entrained air.</li> <li>▪ For application on slabs containing fly ash or slag, contact your Sika Canada Representative for unique application procedures or precautions.</li> </ul>
<b>Health and Safety Information</b>	<p>For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.</p> <p><b>KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY</b></p>

The Information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: [www.sika.ca](http://www.sika.ca)

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