

# EPO-KEM PRODUCT DATA SHEET

## EPOKEM H/PU

“Sandwich” system athletics track surface

(revised 19-5-97)

<b>DESCRIPTION</b>	<i>EPOKEM H/PU</i> is a carefully designed composite of polyurethane resins, accelerators, adhesion promoters, rubber granules and EPDM granules for the surfacing of asphalt and concrete substructures. <i>EPOKEM H/PU</i> is formulated to be permanently elastic and has very good wear, spike, UV and weather resistance. <i>EPOKEM H/PU</i> is installed in-situ in multiple layers with specialised mixing, paving and spreading equipment. <i>EPOKEM H/PU</i> is commonly referred to as the “sandwich” system and is suitable for national and international competition.																																													
<b>FEATURES</b>	When applied and cured correctly by a specialist installer, <i>EPOKEM H/PU</i> has the following features: <ul style="list-style-type: none"> <li>• Resistant to damage from spiked shoes</li> <li>• Conforms to IAAF performance specification</li> <li>• Comfortable, safe and quiet to walk on</li> <li>• Excellent colour retention</li> <li>• Shock absorbing</li> <li>• In-situ installation gives opportunity to smooth base imperfections</li> <li>• Resistant to UV radiation and weathering</li> <li>• Water impermeable (permeable variant available)</li> <li>• Low glare</li> <li>• Slip resistant surface</li> <li>• Tough and resistant to wear</li> <li>• Permanently resilient, elastic and flexible</li> <li>• Low maintenance</li> </ul>																																													
<b>USES</b>	<i>EPOKEM H/PU</i> has been developed predominantly as an athletics track surface. <i>EPOKEM H/PU</i> can also be used as a multi-functional sports surface especially suited to outdoor use.																																													
<b>FINISH</b>	Matt, low glare, smooth but heavily textured slip resistant finish. Available in red and green as standard colours, seven other colours can be selected.																																													
<b>MAINTENANCE</b>	Maintenance is extremely low in most circumstances. Regular sweeping and normal rainfall should keep the surface clean for most of the year. If staining from leaves or other contamination occurs, it may be necessary to wash the surface by scrubbing with a mild detergent solution. In shady areas and tropical climates it may also be necessary to use an approved biocide or fungicide periodically. Please ask your Supplier for further details.																																													
<b>THICKNESS</b>	12 – 13mm but somewhat dependent on flatness of base.																																													
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**Supplier:**

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<b>BASES</b> (substructures)	<p><b>ASPHALT:</b> New asphalt must be cured for at least 14 days, in colder climates up to 28 days. The surface must drain freely without ponding and have a flatness tolerance of no worse than 3mm under a 3m straight edge as measured in any direction. The asphalt must be well compacted, strong, smooth and be clean of all grease, oil, dirt and any foreign matter.</p> <p><b>CONCRETE:</b> Asphalt is the preferred substructure for <b>EPOKEM H/PU</b>, however, concrete may be used if constructed carefully. Most important is the inclusion of a waterproof membrane to ensure no water or water vapour can enter the concrete structure. Concrete must be a minimum of 20mPa, a thickness of 100mm and be finished by steel trowel followed by a light brooming to promote good bonding. Flatness tolerance and drainage as for asphalt. Concrete bases must be cured for a minimum of 1 month before applying <b>EPOKEM H/PU</b>.</p> <p>This information is not intended to be exhaustive, but bases must be designed with these requirements included. Other design considerations are drainage, edge and joint detail. EPO-KEM document “<b>SPECIAL CONDITIONS FOR FLOOR SUBSTRUCTURES</b>” should also be consulted.</p>												
<b>INSTALLATION</b>	<p><b>SURFACE PREPARATION:</b> Check base is constructed to minimum requirements as above. If the base needs cleaning, remove contamination with appropriate detergent or cleaner and flush thoroughly with water. Washing with a high-pressure water blaster (2500psi or higher) may be a good option. Allow surface to dry thoroughly before proceeding with the surfacing. Concrete should be mechanically prepared (e.g. shotblasting) or etched with a solution of 10 parts water to 1 part concentrated hydrochloric acid. Broom well into surface and flush clean with plenty of clean water. Check pH of damp concrete to ensure all traces of acid have been removed. Concrete bases require special care due to their slightly porous nature and tendency to cracking. Prime dry surface with <b>EPOKEM H/PU PRIMER</b> by roller or spray using 15 – 20kg for every 100m<sup>2</sup> of surface area.</p> <p><b>REPAIRS:</b> An expert must do any repairs needed on a concrete base. Filling of non-structural cracks and low areas of an asphalt base may be done with a fine asphalt mix (minimum thickness 10mm) or <b>EPOKEM H/PU PU FILLER</b> (less than 10mm). It may be necessary to enlarge cracks to ensure they can be sufficiently filled.</p> <p><b>APPLICATION:</b> Large areas of <b>EPOKEM H/PU</b> are installed utilising specialist mixing, paving and spreading equipment. This should only be done by a competent specialist sports surfacing contractor approved by EPO-KEM. Smaller areas may be applied by a more simple method but extreme care must still be taken and appropriate mixing equipment used. The first layer of <b>EPOKEM H/PU</b> is spread evenly over the prepared surface by paving machine. Within 7 days the porefiller layer is applied with a flat steel scraper. Within 48 hours of the porefiller layer the toplayer is applied by notched spreader and the liquid material allowed a few minutes to level. Within 10 minutes the liquid top layer must be heavily broadcast with EPDM rubber granules. The excess EPDM granules are removed after allowing 48 hours for the top layer to cure.</p>												
<b>DILUTION</b>	All materials must be used as they are supplied, no dilution is permitted.												
<b>COVERAGE</b>	<table style="width: 100%; border: none;"> <tr> <td style="padding: 2px;"><b>EPOKEM H/PU PRIMER</b></td> <td style="padding: 2px;">5 – 8m<sup>2</sup> per kg</td> </tr> <tr> <td style="padding: 2px;"><b>EPOKEM H/PU</b></td> <td style="padding: 2px;">0.6 kg per mm per m<sup>2</sup> of thickness to be installed</td> </tr> <tr> <td style="padding: 2px;">    - Base layer</td> <td style="padding: 2px;">1.5 – 2.0 kg per m<sup>2</sup></td> </tr> <tr> <td style="padding: 2px;">    - Pore filler</td> <td style="padding: 2px;">1.5 – 2.0 kg per m<sup>2</sup></td> </tr> <tr> <td style="padding: 2px;">    - Top layer</td> <td style="padding: 2px;">7 – 8 kg per m<sup>2</sup> applied, 3 – 4 kg recovered</td> </tr> <tr> <td style="padding: 2px;"><b>EPDM GRANULES</b></td> <td style="padding: 2px;"></td> </tr> </table>	<b>EPOKEM H/PU PRIMER</b>	5 – 8m <sup>2</sup> per kg	<b>EPOKEM H/PU</b>	0.6 kg per mm per m <sup>2</sup> of thickness to be installed	- Base layer	1.5 – 2.0 kg per m <sup>2</sup>	- Pore filler	1.5 – 2.0 kg per m <sup>2</sup>	- Top layer	7 – 8 kg per m <sup>2</sup> applied, 3 – 4 kg recovered	<b>EPDM GRANULES</b>	
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<b>CURING</b>	Full cure will depend on the ambient temperature and relative humidity of the prevailing conditions. Generally it is permitted to use the surface 72 hours after installation is complete (7 days full cure). Your installer or supplier will advise.												
<b>LINEMARKING</b>	Available in all colours required by the IAAF for linemarking. Special colours on request. Always apply at least two coats for opacity. Our recommended linepaint is a very fine particle size, low profile, low bleed, low glare, high opacity material suitable for spray application.												
<b>SAFETY</b>	When mixing and applying any of the above-mentioned products, provide adequate ventilation. Users should avoid spillages and contact with skin or eyes. An <b>MSDS</b> (material safety data sheet) is available for each component and should be consulted before use.												

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