7 June 2024

DEPARTMENT OF PUBLIC WORKS AND INFRASTRUCTURE

NO. 4939



DEPARTMENT OF PUBLIC WORKS

AGRÉMENT SOUTH AFRICA

(Approval of innovative construction products and systems)

Notice is hereby given that Agrément South Africa has, with effect from 25 March 2024, issued an Agrément certificate, details of which appear in the schedule hereto.

SCHEDULE

Agrément Certificate 2019/597 (Finalised in March 2024)

Subject:	SoilTech MKIII: Polymer Based Soil Stabilizer
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Certificate holder: Polymer Pavements (Pty) Ltd

Description:

SoilTech MKIII: Polymer Based Soil Stabilizer, a non-traditional soil stabiliser, is a liquid nano-polymer blend soil bonding agent with elastomers. It is a water based modified bitumen emulsion polymer blend soil bonding agent, which gain strength from mechanical compaction. It is utilized in base and sub-base stabilization using in-situ materials for both paved and non-paved roads.

SoilTech MKIII: Polymer Based Soil Stabilizer has been designed with multiple particle-sized nano-polymers coated with micro surfactants in order to lower surface tension and to utilize water as a medium to penetrate the sub-base layer. The product penetrates through the road's base layer into the sub-base via capillary action. The E-modulus property of the elastomer allow the pavement to be flexible under heavy load.

The mixing ratios and application rate (mix design) depend on the site specific material and the required road design specifications. SoilTech MKIII: Polymer Based Soil Stabilizer is applied at ambient temperature and by use of water tanker

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trucks. It is applied as a form of bitumen stabilizing material and in accordance with the standard design methods detailed in **SANRAL's manual SAPEM 2014 and SABITA's TG2** are applicable. Alternatively, Polymer Pavements (Pty) Ltd.'s guideline documents offer application methods.

NB: This certificate covers the use of SoilTech MKIII Polymer Based Soil Stabilizer, a non-traditional soil stabiliser, for road construction of base and sub-base layers in all regions of South Africa. SoilTech MKIII Polymer Based Soil Stabilizer is a water based modified bitumen emulsion polymer blend soil bonding agent, which gains strength from mechanical compaction and does not become brittle when cured. SoilTech MKIII Polymer Based Soil Stabilizer is purposely designed to penetrate through the road's base layer, into the sub-base layer, via capillary action.

This certificate and Agrément South Africa's assessment apply only to SoilTech MKIII: Polymer Based Soil Stabilizer made and applied as described in this certificate, and where the terms and conditions of certification are complied with.

The Agrément certificate contains detailed information on the product and can be accessed at *http://www.agrement.co.za*.

Copies are obtainable from: Chief Executive Officer (CEO) Agrément South Africa, P O Box 1022, Garsfontein, 0042

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