



KETTLITZ-Silanogran PST 15-E

(former KETTLITZ-Silanogran VP 7217/1)

- technical leaflet –

Silanogran PST 15-E is an alternative product to the well-known product Silanogran PV. It is the 50% granular form of a tri-**ethoxy**-silyl-groups containing polybutadiene on a mineral carrier. The advantage of this product over Silanogran PV is that the silanization reaction liberates ethanol instead of methanol.

According to first available tests, the reaction behavior of Silanogran PST 15-E is very similar to Silanogran PV, so that a "1 : 1 replacement" seems possible. However, own tests are strongly recommended for security.

The starting polymer is a sticky and highly viscous liquid. The granular form not only provides a better handling, it also avoids uncertainties and inaccuracies in the dosage and incorporation into the rubber mixtures.

Properties and application

The active ingredient in Silanogran PST 15-E is a silane-groups-containing low molecular weight polybutadiene and reacts via its reactive alkoxy groups (triethoxy groups) with the silanol-containing surface of silicic acids and siliceous fillers. The unsaturated polymer chain of Silanogran PST 15-E will be integrated into the rubber matrix during vulcanization.

The highest efficiency is achieved in EPDM blends containing laminar-structure silicate fillers (e.g. Sillitin, talc, mica and clay).

Silanogran PST 15-E can be used in both peroxide-crosslinked and sulfur-crosslinked mixtures analogously to Silanogran PV.

Recommended dosage: 2.5 to 5 % by weight based on the siliceous filler

Properties

Chemical Characteristics	triethoxysilyl-modified polybutadiene (50 %) on special carrier (50 %)
Appearance	soft granules (diameter 6–8 mm), free-flowing
Color	beige
Density at 20 °C (g/cm ³)	approx. 1.10 (mathematically)
Storage Stability	1 year under suitable storage conditions
Packing	hermetically sealed PE bags of low melting foil (60–85 °C) of 1 kg net, in cartons of 15 kg each; pre-weighed sachets of between 0.5–2.5 kg net on request available