Rhenogran®
P91-40/Q

Predispersed rubber chemicals and additives

Function
Pre-dispersed aramid chopped fiber pulp for reinforcing silicon rubber based compounds.

Product description
Composition: 40 % aramid fiber pulp (type: Twaron)
60 % elastomer binder (Q) and additives

Appearance: yellowish chips

Density, 20°C: approx. 1.12 g/cm³

Physiological properties: see safety data sheet

Use
Mode of action:
Rhenogran P91-40/Q is made of aramid fibre pulp which is predispersed in a polymeric binder. Rhenogran P91-40/Q is used as a high-grade reinforcing material for silicon rubber compounds. Depending on the amount added (usually 2-20 phr), using Rhenogran P91-40/Q enhances important technical rubber properties: the dimensional stability and green strength of the uncured compound. The vulcanizing rate is usually not affected. Various physical properties of vulcanized rubber compounds, such as elasticity modulus, modulus at low strain, compression resistance, flexural strength, hardness, abrasion, tear propagation resistance, penetration resistance, shrinkage and creep resistance, are also significantly improved, sometimes many times over.

Processing:
To get maximum benefit from the aramid pulp, it is important to ensure that the highly fibrillated pulp is evenly distributed and dispersed in the rubber compound. This is usually impossible to achieve with pure aramid pulp and the pulp forms clusters and does not disperse completely. Because of the composition of its binder and the special way in which it is made, Rhenogran P91-40/Q is easy to incorporate into compounds and disperses well, thereby making it possible to benefit from the improvements to be obtained by using aramid chopped fibre pulp in industrial practice. The orientation of the fibres must be taken into account. Rhenogran

Dosage:
Usually 2-20 phr
Rhenogran P91-40/Q is usually added to the compound in the internal mixer along with other fillers. The orientation of the fibers must be taken into account.

Even in the predispersed form, complete isolation of the fibers is impossible to achieve because of the extremely high branching and entanglement of the fiber pulps used. Complete dispersion of the pulp without residues and its effectiveness in the compound are largely dependent on the mixing method, the mixing time, the mixers used, the compound type and other processing steps.
Application: Moulded and extruded articles, e.g. hoses, seals, etc..

Packaging
12.5 kg carton with PE bag inside on 375 kg skid

Storage stability
In original closed containers under cool and dry conditions 730 days from date of production

Handling
For instructions on handling Rhenogran P91-40/Q, please refer to the current safety data sheet.

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