

Rhenogran® P91-40/CR

Predispersed rubber chemicals and additives

Function

Pre-dispersed aramid chopped fiber pulp for reinforcing natural, synthetic and thermoplastic rubber compounds

Product description

Composition:	40 % aramid fiber pulp (type: Twaron) 60 % elastomer binder (CR) and additives
Appearance:	yellowish chips
Density, 20°C:	approx. 1.05 g/cm ³
Physiological properties:	see safety data sheet

Use

Mode of action: Rhenogran P91-40/CR is made of aramid fiber pulp pre-dispersed in a polymeric binder. Rhenogran P91-40/CR is used as a high-grade reinforcing material for cured rubber compounds and thermoplastic rubbers, preferably based on CR. Depending on the amount added, using Rhenogran P91-40/CR enhances important technical rubber properties, e.g. dimensional stability and green strength of the uncured compound. Various physical properties of the vulcanized rubber compound are improved significantly, sometimes many times over, such as elasticity modulus, modulus at low strain, compression resistance, flexural strength, hardness, abrasion, tear resistance, penetration resistance, shrinkage and creep resistance. The vulcanizing rate is usually not affected.

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. The pulp forms clusters and does not disperse completely.

Processing: Owing to the composition of its binder and the process in which it is prepared, Rhenogran P91-40/CR is easy to incorporate into compounds and disperses well, hence making it possible to benefit from the improvements to be obtained by using aramid chopped fiber pulp in industrial practice.

Dosage: Usually 2-20 phr
Rhenogran P91-40/CR is usually added to the compound in the internal mixer along with the 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: Molded and extruded articles, hose, V-belts, timing belts, seals, conveyor belting, rollers, roofing membranes, etc. based on CR.
Rhenogran P91-40/CR may also be used in other polar elastomers. Keep the binder compatibility in mind.

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/CR, please refer to the current safety data sheet.

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