



KETTLITZ-Pertac/GR

- technical leaflet -

Pertac/GR is a multifunctional process aid based on 1.2-polybutadiene converted into free-flowing granules. Compared with the formerly liquid high viscous 1.2-polybutadiene, the granular form provides better handling, weighing, dosage, incorporation and dispersion.

There are versatile possibilities to use Pertac/GR. First of all it is recommended as polymeric processing aid for all rubber compounds to improve the processability in general. In most cases this is indicated by better rubber compound flow e. g. in injection moldings or extrusions. Rubber compounds produced with Pertac/GR might show an increased Mooney viscosity, but nevertheless, the processability will be improved (flowing properties in the spider mold).

As cross-linkable processing aid Pertac/GR vulcanizes with the polymer by peroxide cross-linking as well as by sulfur curing systems. For this reason it does not influence the adhesion between rubber and other materials

Pertac/GR is co-vulcanizing and therefore not extractable i. e. it has no negative influence on rubber compounds which have to be oil-, benzene- or solvent-resistant.

Pertac/GR is also to be used as reactive co-agent for peroxide cross-linked rubber compounds. Co-agents like TAC, EDMA, BDMA, etc. can be replaced by Pertac/GR without any problems. Pertac/GR improves the level of physical properties, especially in cases where high shore hardness is requested. In most cases it is possible to reduce the compression set value.

Pertac/GR should not only be added to the rubber compound. It is recommended to subtract the selected dosage of Pertac/GR from the amount of polymer used. Especially for the very expensive HNBR (hydrogenated nitrilic rubber) a partial replacement of the polymer by Pertac/GR will be of interest. Tests indicated that the replacement of the polymer by Pertac/GR up to 15 phr not only reduces the raw material price of the rubber compound, the physical and processing properties will also be optimized.

Recommended dosage: 5–15 phr

Properties

Chemical Characteristics		60 % liquid polybutadiene 40 % carrier
Appearance		white granules (diameter 6–8 mm), free-flowing
Density at 20 °C	(g/cm ³)	approx. 1.18
Bulk Density	(g/ml)	approx. 0.5
Physiol. Behavior		see safety data sheet
Storage Stability		1 year under suitable storage conditions
Packing		hermetically sealed PE bags of low melting PE foil (60–85 °C) of 1 kg each in cartons of 15 kg each. Pre-weighed sachets of between 0.5–2.5 kg net on request at no extra cost available