Technical Data Sheet

Rhenogran®
ZADT-50

Predispersed rubber chemicals and additives

Function

Non-staining specialty accelerator for rapid vulcanization of EPDM and other diene rubbers, not containing any secondary amines which can form N-nitrosamines

Product description

Composition:	50 % zinc dialkyldithiophosphate, activated, 50 % elastomer binder and dispersing agents
Appearance:	off-white granules
Density, 20 °C:	approx. 1.15 g/cm³
Physiological properties:	see safety data sheet

Use

Mode of action:	Rhenogran ZADT-50 is used in conjunction with sulfenamide, thiazole, thiuram, carbamate and guanidine as a secondary accelerator in the sulfur vulcanization of EPDM, synthetic diene rubbers and natural rubber. During vulcanization, it does not form any secondary amines which can be converted to N-nitrosamines. Rhenogran ZADT-50 is highly soluble and disperses very well in all conventional types of rubber, especially EPDM. With Rhenogran ZADT-50, it is therefore possible to create accelerator systems for EPDM which are non-blooming and which are characterized by rapid vulcanization. Usually, the vulcanizates do not show discolorization. Higher vulcanization speeds and shorter scorch times can be achieved with Rhenogran ZADT-50 than with Rhenogran ZDT-50. In efficient vulcanization of NR and other rubbers, such as IR, SBR, NBR, and IIR, Rhenogran ZADT-50 provides vulcanizates with good heat resistance and provides a high degree of crosslinking.
Processing:	The thermoplastic, fully compatible elastomer binder which is combined with special dispersing agents allows quick absorption and excellent dispersion in rubber. In this way, optimal activity of the effective substance is assured.

Dosage:	Sulfur content of Rhenogran ZADT-50 approx. 5.3 % As secondary accelerator: 2 - 3 phr + 0.5-2 phr of a primary accelerator. If the compounds are highly filled (carbon black, mineral fillers, plasticizer oils), the optimum amount may be higher. High vulcanization speeds without blooming can be obtained by using the following vulcanization systems (dosages in phr): In EPDM: Rhenogran S-80 1.0-3.0 Rhenogran MBT-80 0.8-2.0 Rhenogran ZBEC-70 1.0-2.0 Rhenogran ZADT-50 2.0-4.0 Rhenogran CLD-80 0.6-1.5 In NR, SBR and NBR: Rhenogran S-80 0.25-0.6 Rhenogran MBT-80 0.6-1.2 Rhenogran TMTD-80 0.4-0.6 Rhenogran ZADT-50 1.0-4.0 Rhenogran CLD-80 0.5-1.0
Application:	Rhenogran ZADT-50 is used in injection-molded and extruded technical articles of all types including profiles, hose, sheeting and tank linings.

Packing
20 kg carton with PE bag inside on 800 kg skid

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

Handling
For additional handling information on Rhenogran ZADT-50 please consult current safety data sheet.

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RheinChemie Additives

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