

## Rhenocure® SDT/S

Specialty and standard chemicals

### Function

Non-staining sulfur donor for the vulcanization of natural and synthetic rubbers

### Product description

Composition:	70 % phosphoryl polysulfide bound to 30 % high-activity silica
Appearance:	white to light grey/blue powder
Density, 20 °C:	approx. 1.23 g/cm <sup>3</sup>
Sulfur content:	ca. 13.5-16.5 %
Solubility in water:	negligible
Physiological properties:	please see safety data sheet

### Use

Mode of action:	<p>Under common curing conditions Rhenocure SDT/S liberates free sulfur, which, unlike normal sulfur, forms mono- and di-sulfidic bridges. These are responsible for the excellent heat aging resistance of Rhenocure SDT/S vulcanizates. The blooming, generally observed when using thiuram disulfides as crosslinking agents, is not observed with Rhenocure SDT/S. Compounds cured with Rhenocure SDT/S show excellent reversion resistance as can be seen in the broad curing plateau of the Rheometer curves.</p> <p>Rhenocure SDT/S is therefore especially suitable for natural rubber compounds and all applications where high temperatures occur during the curing process, e.g. salt bath vulcanization and injection molding. Vulcanizates show favorable compression set properties. The use of Rhenocure SDT/S is recommended wherever a high degree of heat-resistance is required. In many cases, the amounts of conventional antioxidants can be reduced. Therefore, it can also be used to improve the aging properties of compounds based on SBR, NBR and EPDM.</p>
Processing:	Rhenocure SDT/S is easily incorporated into the rubber compound and should be added at the same time the normal sulfur or sulfur donor is added.
Dosage:	Starting formulations for a natural rubber stock are: Rhenogran S-80: 0-2.5 phr Rhenogran MBTS-80: 1-2.5 phr Rhenocure SDT/S: 2-4 phr Rhenogran ZDT-50: 1-4 phr

Applications: Technical rubber articles, e.g. EPDM extrudates, thick molded technical components, especially made of NR

### **Packaging**

20 kg carton with PE bag inside on 800 kg skids

### **Storage stability**

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

### **Handling**

For additional handling information on Rhenocure SDT/S consult current safety data sheet.

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