

## Vulkanol® FH

## Processing Promoters

### Function

Vulkanol® FH can be used in the production of technical rubber goods based on synthetic rubber in cases where high building tack is needed.

### Product description

Composition: aromatic polyether

Appearance: bright yellow, viscous liquid

Property	Nominal value	Unit	Test method
Refractive index (at 50 °C)	1.570 ± 0.005	---	DIN 51 423
Density (at 50 °C)	1.060 ± 0.020	g/cm <sup>3</sup>	DIN 51 757 (Method 3)
Viscosity (at 50 °C)	10500 ± 4500	mPa.s	DIN 53 019

### Use

**Mode of action:** Compounds based on synthetic rubbers often have low tack, Vulkanol® FH enhances this property considerable. The product can be used in the production of technical rubber goods in cases where high building tack is needed in the production of technical rubber goods based on synthetic rubber. These include conveyor belting, V-belts, roll covers and other built-up rubber articles. The product is also suitable for bonding compounds. The tack remain practically unchanged during storage of the green compound, provided that they are not affected by crystallization or scorching. In some cases the processability of synthetic rubber compounds is also improved.

**Processing:** Owing to the strong tackifying effect of Vulkanol® FH it is advisable, where processing on open mills is concerned, to incorporate the quantity of stearic acid needed for the compound along with the Vulkanol® FH; this ensures that the compound does not stick to the rolls of the open mill excessively. Vulkanol® FH, like stearic acid, has a good dispersing effect on carbon black and light-colored fillers.

In general Vulkanol® FH does not affect the storage stability and scorch safety of the compounds based on synthetic rubbers.

**Vulcanizate Properties:** In contrast to most other synthetic plasticizers Vulkanol® FH has practically no effect on the low temperature flexibility of vulcanizates, and at high levels it reduces the rebound resilience. Its effects on other properties such as tensile strength, modulus and hardness are merely of the same order as those of plasticizers in general.

As Vulkanol® FH is not freely compatible with aliphatic hydrocarbons and mineral oils, they have only a slight tendency to extract it from vulcanizates. Thus Vulkanol® FH is particularly suitable for goods needing oil resistance, e.g. those based on NBR or CR.

**Dosage:** Typical levels of Vulkanol® FH addition based on 100 parts by weight of elastomer are:

NBR (e.g. Perbunan®, Krynac®)	20 phr
CR (e.g. Baypren®)	20 phr
NR	20 phr
SBR (e.g. Buna® SE, Buna® VSL)	5 - 15 phr
IIR	20 phr

## Packaging

50 kg metal drum on 450 kg skid or 200 kg rolling channel drum on 800 kg skid or 1000 kg IBC.

## Storage stability

In original closed containers under cool (approximately 25 °C) and dry conditions 730 days from date of production.

## Handling

For additional handling information on Vulkanol® FH please consult current safety data sheet.

These raw material properties are typical and, unless specifically indicated otherwise, are not to be considered as delivery specification.

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