

Product Information

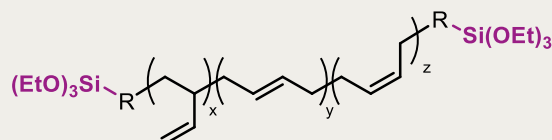
POLYVEST® ST-E 60

TRIETHOXYSILANE-TERMINATED LIQUID POLYBUTADIENE

PRODUCT DESCRIPTION

POLYVEST® ST-E 60 is a stereospecific, low viscous and triethoxysilane-terminated liquid polybutadiene having the following composition of double bonds:

1,2-vinyl (x):	approx. 22%
1,4-trans (y):	approx. 58%
1,4-cis (z):	approx. 20%



Specification		
Property	Unit	Value
Viscosity @ 20°C DIN EN ISO 3219	mPa•s	7,500 – 15,000
Viscosity @ 30°C DIN EN ISO 3219	mPa•s	4,000 – 7,500
Gardner color DIN EN ISO 4630		≤ 1.5
Water content DIN 51 777-2	mg/kg	≤ 500

Typical Properties		
Property	Unit	Value
Mean molar mass, M_n GPC* (polybutadiene standard)	g/mol	approx. 3,200
Density @ 25°C DIN 51757, method 3	g/cm ³	0.8 – 1.0
Mean silane functionality Calculated		approx. 1.5
Glass transition temperature (T_g) DIN EN ISO 11 357-1	°C	approx. -80
Residue on ignition at 900°C ASTM D 6740	wt. %	1.0 – 3.5

*GPC: Gel Permeation Chromatography

TYPICAL APPLICATIONS

In this form POLYVEST® ST-E 60 is used in various fields of application such as:

- additive for tires
- adhesive and sealants
- insulated glass sealants
- waterproofing membranes and coatings
- dispersion additive for rubber-based formulations

We are pleased to send guide formulations.

BENEFITS & ADVANTAGES

Due to its unsaturated polymer backbone and the terminal triethoxysilane functionalities, the apolar and hydrophobic hydrocarbon resin POLYVEST® ST-E 60 is a highly reactive binder with very good dispersing properties of inorganic fillers.

POLYVEST® ST-E 60 exhibits the following features:

- excellent compatibility with solid rubber and recycled rubber
- high chemical resistance
- good dispersion and chemical modification with high loading capacity of inorganic fillers
- high cold resistance by keeping good flexibility at low temperatures
- good solubility in aliphatics, aromatics and ethers
- low moisture and gas permeability
- possibility of moisture induced curing

HANDLING & PROCESSING

POLYVEST® ST-E 60 is supplied under a blanket of inert gas (nitrogen). The contact with air oxygen should be avoided as possible. Opened containers should be blanketed with inert gas again and closed tightly.

We are pleased to send our current Material Safety Data Sheet.

PACKAGING

- Steel drums (content 180 kg); minimum order quantity 4 drums on pallet
- IBC (content 850 kg)

STORAGE

POLYVEST® ST-E 60 is stable for at least 1 year with exclusion from air, light and moisture at storage temperatures below 25°C.

SHELF LIFE

1 year

Disclaimer

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