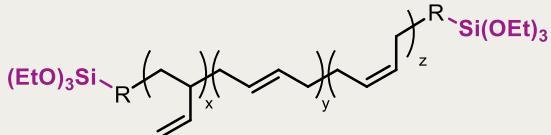


Product Information

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, Mn GPC* (polybutadiene standard)	g/mol	approx. 3,200
Density @ 25°C DIN 51757, method 3	g/cm³	0.8 – 1.0
Mean silane functionality Calculated		approx. 1.5
Glass transition temperature (Tg) 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

This information and all further technical advice are based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third-party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. The performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

Evonik Operations GmbH

Coating & Adhesive Resins
Paul-Baumann-Straße 1
45772 Marl
Germany
Phone +49 2365 49-4843
evonik.click/adhesive-resins

