

POLYVEST® eCO MA 75 Bio

ISCC certified material (mass balance approach)

MALEIC ANHYDRIDE-FUNCTIONALIZED LIQUID POLYBUTADIENE

GENERAL DESCRIPTION

POLYVEST® eCO MA 75 Bio is a maleic anhydride adduct of a low molecular weight 1,4-cis polybutadiene which has succinic anhydride groups randomly distributed along the polymer chains. This makes the originally apolar polybutadiene more polar and accessible for various chemical reactions.

An amount of **bio-based** material equivalent to **>92% of POLYVEST® eCO MA 75 Bio** is allocated to this product using the ISCC mass balance approach. With this product, Evonik is contributing to the replacement of virgin fossil resources by renewable feedstocks and thus, supporting the circular economy/bioeconomy.

SPECIFICATION

Property	Value	Unit	Test Method
Viscosity at 20°C	6,000 - 9,000	mPa s	DIN EN ISO 3219
Gardner Color	≤ 2,5		DIN EN ISO 4630
Acid Number (as dicarboxylic acid)	70 - 90	mg KOH/g	DIN EN ISO 2114

TYPICAL DATA

Property	Value	Unit	Test Method
Mean Molar Mass	approx. 3,000	g/mol	GPC (polystyrene standard)
Iodine Number	380 - 420	g Iod/100 g	DIN 53 241
Density at 20°C	approx. 0.95	g/cm ³	DIN ISO 2811-1
Flash Point	approx. 300	°C	DIN EN ISO 2719
Ignition Temperature	approx. 360	°C	DIN 51 794
Pour Point	approx. - 25	°C	DIN ISO 3016

SUPPLY FORM

Viscous liquid

PACKAGING AND TRANSPORT

- steel drums (content 180kgs); minimum order quantity 4 drums on pallet
- ISO-bulk containers (IBC) of polyethylene (content 900kgs)
- delivery in road tankers

STORAGE

POLYVEST® eCO MA 75 Bio is stable for at least 1 year with exclusion from air, light and moisture at storage temperatures below 25°C.

GENERAL USE AND APPLICATIONS

The polar, hydrophobic hydrocarbon resin POLYVEST® eCO MA 75 Bio is a highly reactive binder featuring the following characteristics:

- high chemical resistance
- high water resistance
- high electrical insulation properties
- high cold resistance
- good solubility in aliphatic, aromatics and ethers
- good compatibility with long-oil alkyd resins, rosin resins and zinc resonates

In this form POLYVEST® eCO MA 75 Bio is used in the following areas of application:

- adhesive and sealant compositions
- electrical insulations and potting compounds (2pack systems)
- polymeric chalk activator in EPDM-compounds
- modifier in carbon black filled EPDM-compounds
- modifier in silica filled rubber compounds
- modifier in rubber compounds for car tires
- modifier in silicone sealants

We are pleased to send guideline formulations.

SAFETY AND HANDLING

POLYVEST® eCO MA 75 Bio reacts with atmospheric oxygen to form peroxides and cross-linking and is therefore packed and delivered under a blanket of inert gas (nitrogen). During handling care has to be taken to exclude atmospheric oxygen as much as possible from the product. Opened containers should be blanketed with inert gas again and closed tightly.

We are pleased to send our current Safety Data Sheet.

Marl, March 9th, 2022; This data sheet replaces all former issues.

POLYVEST® is a registered trademark of Evonik Industrie AG or one of its subsidiaries.

Disclaimer

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