

## Product information

# VESTANAT<sup>®</sup> EP\*<sup>1</sup>-M 222 X

(PRELIMINARY)

## GENERAL DESCRIPTION

VESTANAT<sup>®</sup> EP-M 222 X is a methoxysilane functional urethane crosslinker that can be used as a crosslinker to increase the flexibility of highly scratch resistant coatings, e.g. highly scratch resistant NISO\*<sup>2</sup> coatings. It is dissolved at 85 % in xylene, allowing it to be used in low-VOC coatings formulations.

\*<sup>2</sup> NISO = Non-isocyanate

## SPECIFICATION (PRELIMINARY)

Property	Value	Unit	Test method
Viscosity at 23°C	5000 - 10000	mPas	DIN EN ISO 3219
Non-volatile constituent	85	% by wt.	calculated

## TYPICAL DATA

Property	Value	Unit	Test method
NCO-content	≤ 0,1	% by wt	DIN EN ISO 11909 ASTM D 2572
Colour (Hazen)	≤ 50	mg Pt/l	DIN EN ISO 6271

\*<sup>1</sup> EP = Experimental Product

This is an experimental product at the development stage. No definitive statements can therefore be made as to type conformity, processability, long-term performance characteristics or other production or application parameters. Therefore, the purchaser/user uses the product entirely at its own risk without having been given any warranty or guarantee and agrees that the supplier shall not be liable for any damage, of whatever nature, arising out of such use. The figures given should be regarded as non-binding approximate data only, and not as guide values or binding minimum values. Commercialization and continued supply of this product are not assured. Its supply may be discontinued at any time.

## PROPERTIES AND APPLICATIONS

VESTANAT® EP-M 222 X is dissolved in xylene and transparent. The crosslinker is primary used to increase the flexibility of VESTANAT® EP-M 95 based, scratch resistant stoving coatings for e.g. automotive (OEM, car refinish), plastic and maintenance applications. VESTANAT® EP-M 222 X can be used either in combination with VESTANAT® EP-M 95 or as a single crosslinker. Combinations with VESTANAT® EP-MF 201 or VESTANAT® EP-MF 202 are also possible. In order to adjust a specific reactivity profile the use of catalysts is advised. Suitable catalyst recommendations are available on request.

## STORAGE AND PACKAGING

VESTANAT® EP-M 222 X is an experimental product and therefore final information on storage stability isn't yet available. Due to the fact that the product is sensitive to moisture we advise to store VESTANAT® EP-M 222 X in a tightly sealed container to avoid an increased entry of water for re-use.

## SAFETY AND HANDLING

The formation of methanol during curing must be taken into consideration. Provisions to protect workers have to be installed. For further information on the safe handling of VESTANAT® EP-M 222 X please refer to our Safety Data Sheet.

Marl, November 25, 2019; This data sheet replaces all former issues.

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

### 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. 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 RESOURCE EFFICIENCY GMBH

Business Line Crosslinkers  
Paul-Baumann-Str. 1  
45764 Marl  
Germany

[www.evonik.com/crosslinkers](http://www.evonik.com/crosslinkers)

For contact in your country, please visit: [www.evonik.com/crosslinkers-contact](http://www.evonik.com/crosslinkers-contact)

### EVONIK CORPORATION

Business Line Crosslinkers  
299 Jefferson Road,  
Parsippany, NJ 07054-0677  
USA

### EVONIK SPECIALITY CHEMICALS (SHANGHAI) CO., LTD.

Business Line Crosslinkers  
55, Chundong Road  
Xinzhuang Industry Park  
Shanghai, 201108  
China

