

VESTANAT® EP*-DS 1205

(Preliminary)

43.13.341e / 05.10

General description

VESTANAT EP-DS 1205 is a blocked polyisocyanate based on the cycloaliphatic VESTANAT IPDI (Isophoronediiisocyanate) emulsified in water without any auxiliary solvents.

Combined with water dilutable or in water emulsified OH-terminated resins it is used to formulate one component, heat curing coating systems.

The crosslinking occurs above the splitting temperature while the blocking agent evaporates.

Typical data

Property	Value	Unit	Test method
Appearance	white milky liquid	-	visual
Non volatile matter	42 ± 1	% by wt.	DIN EN ISO 3251 (60 min. 105 °C)
pH-value	8.9 ± 0.5	-	DIN ISO 976
blocked NCO-content (resin)	11	% by wt.	calculated
splitting temperature	approx. 145	°C	
Viscosity at 23 °C D=200 s ⁻¹	20 - 200	mPa s	DIN EN ISO 3219
Flash point (closed cup)	> 100	°C	DIN EN ISO 2719

Properties and Applications

VESTANAT EP-DS 1205 is a blocked polyisocyanate for the crosslinking of OH-terminated resins/dispersions. Combined with suitable polyols, preferably resins with low glass transition temperature (T_g lower than 10 °C), coatings with excellent yellowing resistance and weather stability are achieved.

Information about suitable resins are available on request.

VESTANAT EP-DS 1205 can be used as sole crosslinker or in combination with melamine resins. The compatibility to the used melamine resin should be tested in every case.

Catalysis

The use of hydrolytical stable tin catalysts in concentration of 0.1-0.5 % by wt. (calculated on solid resin) can have an accelerating effect. During storage of the formulated system, the activity of the catalyst may decrease occasionally.

* EP = Experimental Product

Storage and Packaging

VESTANAT EP-DS 1205 can be stored in unopened containers for at least 6 months without loss of quality in accordance with the above specification.

It is essential to homogenise the product before use. Temperatures below 0°C as well as storing of partially unloaded containers has to be avoided.

VESTANAT EP-DS 1205 is supplied in 25 kg and 200 kg one-way plastic containers.

Safety and Handling

Please refer to our Material Safety Data Sheet.

Evonik Resource Efficiency GmbH	Evonik Corporation	Evonik Speciality Chemicals Co., Ltd.
Paul-Baumann-Str. 1	Reource Efficiency	55, Chundong Road
45764 Marl	299 Jefferson Road	Xinzhuang Industry Park
Germany	Parsippany, NJ 07054-0677, USA	Shanghai, 201108, PR China
PHONE +49 2365 49-02	PHONE +1 973 929-8000	PHONE +86 21 6119-1000
FAX +49 2365 49-5030	FAX +1 973 929-8460	FAX +86 21 6119-1168
www.evonik.com/crosslinkers	www.evonik.com/crosslinkers	www.evonik.cn/crosslinkers
www.evonik.com/coatings	www.evonik.com/coatings	www.evonik.com/coatings
E-MAIL vesta@evonik.com	E-MAIL vesta@evonik.com	E-MAIL vesta@evonik.com

Marl, May 3, 2010

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

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