

VESTANAT® B 1370

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General description

VESTANAT B 1370 is a blocked, cycloaliphatic polyisocyanate. It is supplied as a solution of 60 % in n-butyl-acetate/xylene.

Specification

Property	Value	Unit	Test method
Solids content	60 ± 1	% by wt.	ISO 3251 (1.5 h 110 °C, < 2 hPa)
Viscosity at 23 °C	2.6 ± 0.5	Pa·s	ISO 3219

Typical data

Solvents	–	n-butylacetate/ xylene (3 : 5)	–	–
Free NCO content	< 0.1	% by wt.	ISO 11 909	ASTM D 2572
Latent NCO content	approx. 8	% by wt.	ISO 11 909 (modified)	
Splitting temperature	130	°C	–	–
Density (25 °C)	1.03	g/cm ³	DIN 51 757	ASTM D 2111
Colour (APHA)	≤ 150	–	DIN/ISO 6271	–
Flash point (closed cup)	28	°C	DIN 53 213	ISO 1516
Vapour pressure at 50 °C	approx. 10	hPa	–	–

Properties and Applications

VESTANAT B 1370 is a blocked polyisocyanate for crosslinking of suitable hydroxylated resins, like polyester, acrylic and alkyd resins.

VESTANAT B 1370 may be classified as an exceptionally light fast and weathering resistant resin. It is characterized by an excellent balance of reactivity and storage stability of the formulated paint.

Typical fields of application are:

- Exterior Can Coatings (overprint varnishes, printing inks, basecoats) in combination with polyesters of the DYNAPOL® LH-range characterized by good adhesion, colour stability and sterilisation resistance.
- Coil Coatings for exterior applications
- Automotive OEM topcoats with improved acid etch resistance
- Stone chip resistant automotive OEM primer/surfacer

In principle it is possible to formulate PUR stoving paints which cure at temperatures ≥ 130 °C. It is recommended to use tin catalysts, e.g. dibutyl tin dilaurate (DBTDL), in concentrations of 0.1 – 0.5 % by weight calculated on the resin.

The properties of the cured coatings are decisively determined by the polyols employed. Due to the fact that VESTANAT B 1370 imparts hard segments into a coating, it might be necessary to use additionally flexibilizing polyols, recommendations are available on request.

Table of Curing Conditions

In table 1 curing conditions determined by using 0.8 mm thick aluminum panels placed in a circulating air oven are listed. Stated temperatures refer to those of the circulating air in the stoving oven.

Tab. 1: Curing Conditions of 1K PUR Systems

System	Stoving times in minutes at temperatures of				
	130 °C	140 °C	150 °C	160 °C	180 °C
(with 0.5 % DBTDL on resin)					
VESTANAT B 1370 / polyester (2.5 – 4 % OH)	50	30	15	10	5
VESTANAT B 1370 / acrylic polyol (2.5 – 4 % OH)	30	15	10	8	4

Storage and Packaging

VESTANAT B 1370 can be stored in unopened containers for at least one year without loss of quality in accordance with the above specification.

VESTANAT B 1370 is supplied in non returnable 25 kg net cans and in non returnable 200 kg net drums.

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

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