

VESTANAT[®] B 1358 A

43.13.017e / 09.16

General description

VESTANAT[®] B 1358 A is a blocked, cycloaliphatic polyisocyanate. It is supplied as a 63 % solution in Solvent Naphtha.

Specification

Property	Value	Unit	Test method
Non volatile matter	63 ± 1	% by wt.	DIN EN ISO 3251 (1,5 h 110 °C, < 2 hPa)
Viscosity at 23 °C	5.0 ± 1	Pa·s	DIN EN ISO 3219

Typical data

Solvents	–	Solvent Naphtha	–	–
Free NCO content	< 0.1	% by wt.	DIN EN ISO 11 909	ASTM D 2572
Latent NCO content	approx. 8	% by wt.	DIN EN ISO 11 909 (modified)	
Splitting temperature	130	°C	–	–
Colour (Hazen)	≤ 150	mg Pt/l	DIN EN ISO 6271	–
Flash point (closed cup)	47	°C	DIN EN ISO 1523	ISO 1516
Vapour pressure at 20 °C	< 10	hPa	–	–

Properties and Applications

VESTANAT[®] B 1358 A is a blocked polyisocyanate for crosslinking of suitable hydroxylated resins, like polyester, acrylic and alkyd resins. VESTANAT[®] B 1358 A may be classified as an exceptionally light fast and weathering resistant hardener. 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 total resin.

The properties of the cured coatings are decisively determined by the polyols employed. Due to the fact that VESTANAT[®] B 1358 A imparts hard segments into a coating, it might be necessary to use additionally flexibilizing polyols. Recommendations are available on request.

For special purposes like different solvent cuts VESTANAT[®] B 1358 is also available as a solvent free version (VESTANAT[®] B 1358/100, Product Information no. 43.13.075e).

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 1358 A/polyester (2.5 – 4 % OH)	55	35	15	10	5
VESTANAT [®] B 1358 A/acrylic polyol (2.5 – 4 % OH)	25	15	10	8	4

Storage and Packaging

VESTANAT[®] B 1358 A can be stored in unopened containers for at least one year without loss of quality in accordance with the above specification.

VESTANAT[®] B 1358 A is supplied in non returnable 25 kg net cans and in non returnable 200 kg net drums.

Safety and Handling

Please refer to our Safety Data Sheet.

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