DURANATE[™] 24A-100

Type Aliphatic polyisocyanate (HDI Biuret)



Features

- # High NCO content
- # Lower viscosity
- # Good coating film appearance
- # Good adhesion
- # Good weather resistance

Applications

- # Two-component applications
- # Plastic coatings
- # Automotive refinishes
- # Automobile, motorcycle ; base coat and top coat
- # Heavy duty coatings

Typical properties

Appearance	Colorless to slightly yellowish clear liquid
Non-volatile	100 wt%
Solvent	None
NCO content	23.5 wt%
Viscosity	1,800 mPa \cdot s at 25 $^\circ\!\mathrm{C}$
Color value	< 1 (Gardner)
NCO equivalent weig	ht Approx. 180
Flash point	186 °C
Density at 20 $^\circ\!\mathrm{C}$	1.13

These values provide general information and are not part of the product specifications.

Stability / thinnability

DURANATE[™] 24A-100 can be thinned with esters, ketones and aromatic, hydrocarbons such as ethyl acetate, butyl acetate, methoxypropylacetate(PMA), methyl ethyl ketone, methyl-butyl ketone, cyclohexanone, toluene, xylene, Solvesso #100 and mixture thereof. Generally speaking, it has good compatibility with the solvent mentioned. However, the solutions formed must be tested for their storage stability. Only PU grade solvents can be used (max. 0.05% water, absence of reactive groups such as hydroxyl or amines groups). Aliphatic hydrocarbons such as hexane, cyclohexane, methylcyclohexanes and mineral spirits, are unsuitable as solvents because of their poor solubility.

Aromatics	Toluene Xylene Solvesso#100	+ + +
Esters	Ethyl acetate n-Butyl acetate	+ +
Ketones	Methyl ethyl ketone Methyl iso-butyl ketone	+ +
Ether-esters	Methoxypropylacetate (PMA)	+
Aliphatics	Cyclohexane Mineral spirit	~~~~

+; Soluble, \sim ; Insoluble

DURANATE[™] 24A-100 should not be thinned to below a solid content of 40%. Prolonged storage of solution with lower solid content may result in turbidity and sedimentation.

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With polyisocyanates

Resin solution

DURANATE [™]	22A-75PX	+	
	21S-75E	+	
	TPA-100	+	
	TPA-90SB	+	
	TKA-100	+	
	MFA-75B	+	
	TSA-100	+	
	TSS-100	+	
	TSE-100	~	
	E402-90T	+	
	E405-80T	+	
	D-101	+	
	D-201	+	
VESTANAT	T1890L	+	
	T1890E	+	
Desmodur	Z4470	+	
		+ . 50	luble, ~; Insoluble
		· , 00	
With polyols and	other resins	Resin solution	Dried film
Acrydic	A801	+	+
/ tory and	A801-P	+	+
	A851	+	+
	50-257	+	+
Halwemer	F-45	+	+
Hypomer	FX-2050	+	+
	FX-3070	+	+
Setalux	1198	+	+
	1753	+	+
Lumiflon	LF-100	+	+
	LF-200	+	+
	LF-400	+	+

+ ; Soluble, ~ ; Insoluble + ; Transparent, ~ ; Hazy

Mixing ratio of DURANATE[™] 24A-100 with polyols is based on NCO/OH equivalent ratio of 1/1.

Storage

DURANATE[™] 24A-100 is sensitive to moisture and should therefore always be stored in sealed containers.

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Characteristics of viscosity

1. Solid vs. Viscosity









Fig-2. Temperature behavior of DURANATE[™] 24A-100

For further information:

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