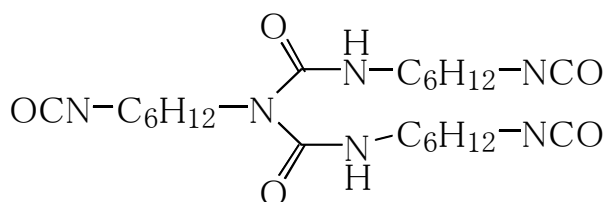


Type Aliphatic polyisocyanate (HDI Biuret)



Features

- # 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	75 wt%
Solvent	Methoxypropylacetate (PMA)/Xylene=1/1
NCO content	16.5 wt%
Viscosity	210 mPa · s at 25 °C
Color value	< 1 (Gardner)
NCO equivalent weight	Approx. 255
Flash point	39.0 °C
Relative density	1.07(20 °C) (H ₂ O = 1)

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

Stability / thinnability

DURANATE™ 22A-75PX can be thinned with esters, ketones and aromatic hydrocarbons such as ethyl acetate, butyl acetate, methoxypropylacetate(PMA), methyl ethyl ketone, methyl iso-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	~
	Methylcyclohexane	~
	Mineral spirit	~

+ ; Soluble, ~ ; Insoluble

DURANATE™ 22A-75PX 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.

Compatibility

With polyisocyanates

Resin solution

DURANATE™	24A-100	+
	21S-75E	+
	TPA-100	+
	TPA-90SB	+
	TKA-100	+
	MFA-75X	+
	TSA-100	+
	TSS-100	+
	TSE-100	~
	E-402-90T	+
	E-405-80T	+
	D-101	+
	D-201	+
	VESTANAT	T1890L
T1890E		+
Desmodur	Z4470	+

+ ; Soluble, ~ ; Insoluble

Desmodur; Covestro AG, VESTANAT; Degussa

With polyols and other resins

Resin solution

Dried film

Acrylic	A801	+	+
	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

Acrylic; DIC Co.,Ltd., Halwemer; DSM NeoResins, Hypomer; Deuchem Co.,Ltd., Setalux; Nuplex Resins(ex-Akzo Nobel Resins' product) ,Lumiflon; Asahi Glass Co.,Ltd.

Mixing ratio of DURANATE™ 22A-75PX with polyols is based on NCO/OH equivalent ratio of 1/1.

Storage

DURANATE™ 22A-75PX is sensitive to moisture and should therefore always be stored in sealed containers.

Characteristics of viscosity

1. Solid vs. Viscosity

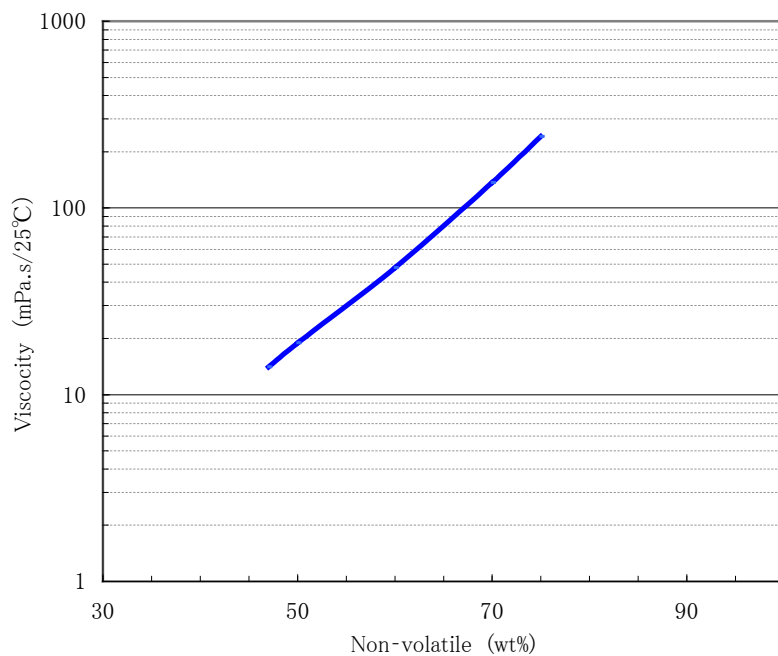


Fig-1. Dilution behavior of DURANATE™ 22A-75PX

2. Temperature vs. Viscosity

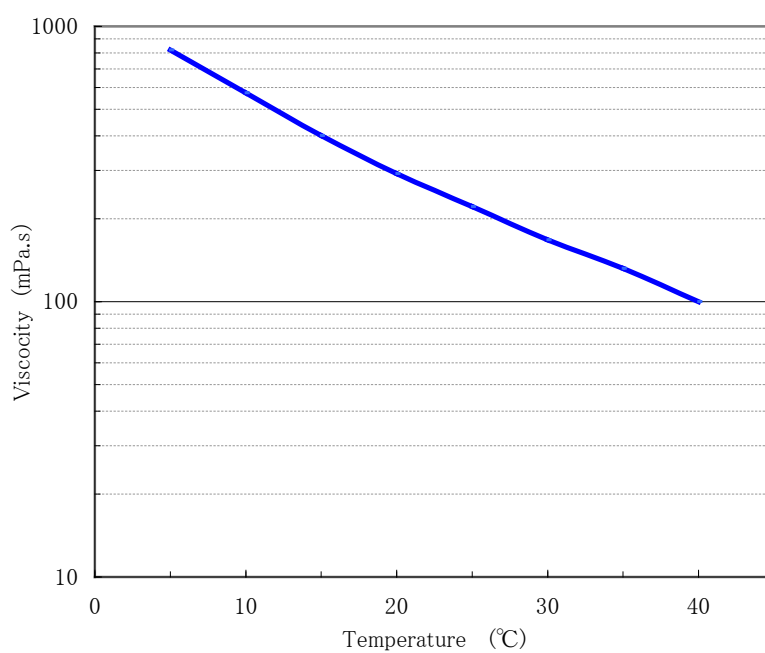


Fig-2. Temperature behavior of DURANATE™ 22A-75PX

Weatherability

Weatherability by Super-Xenon Weathermeter

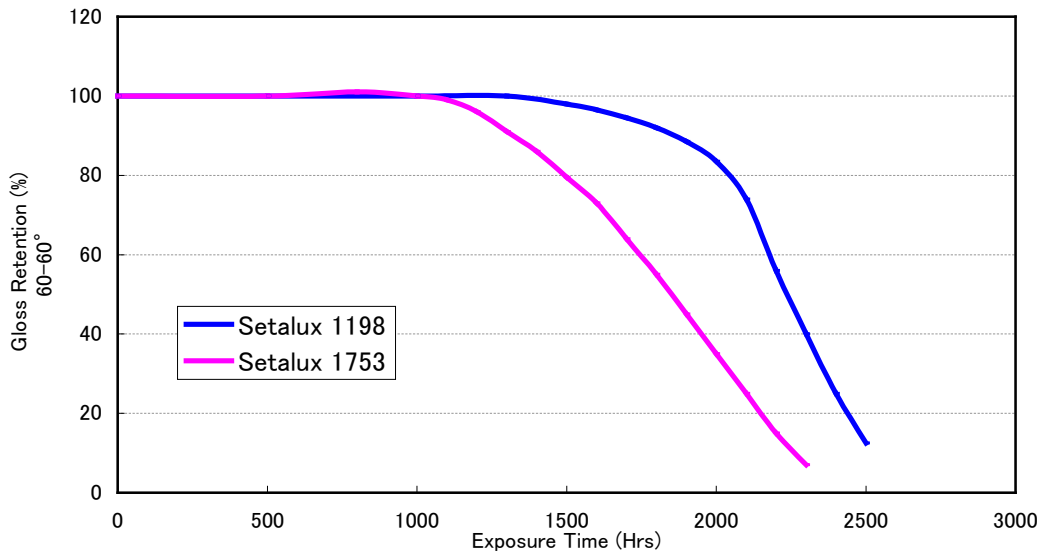


Fig-3. Weathering properties of DURANATE™ 22A-75PX

For further information:

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