

HDI Low Viscosity AsahiKasei TLA-100

Type:

Aliphatic polyisocyanate based on hexamethylene diisocyanate.

Features:

- # High NCO content
- # Low viscosity
- # Excellent weather resistance
- # Excellent Compatibility
- # Good coating film appearance

Applications:

- # Two-component applications
- # Automotive OEM coatings
- # Automotive refinishes
- # Plastic coatings

Typical properties:

Appearance	Colorless to slightly yellowish clear liquid
Non-volatile	100 wt%

Solvent	None
NCO content	23.5 wt%
Viscosity	500 mPa·s at 25'C
Color value	< 1 (Gardner)
NCO equivalent weight	Approx.180

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

Comparison with Conventional Trimer:

	TLA-100	Conv Trimer
Viscosity mPa * s/25°C	500	2,700
NCO content %	23.5	21.7
Functionality	3.0	3.4
HDI conc. After 50°C . 1 month	Low	Low
Weather resistance of cured film	Excellent	Excellent
Hardness of cured film	High	High

Compatibility with polyols:

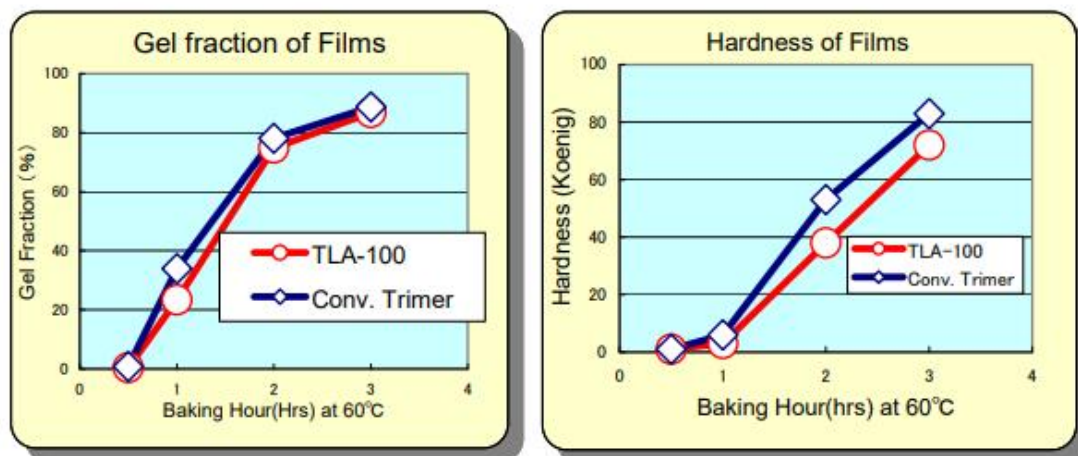
<u>With polyols</u>		<u>Resin solution</u>	<u>Dried film</u>
Acrylic	Setalux 1152(*)	+	+
	Setalux 1184(*)	+	+
	Setalux 1198(*)	+	+
	Setalux 1199(*)	+	+
	Setalux 1767(*)	+	+
	Setalux 1903(*)	+	+
Polyester	Setal 166(*)	+	+

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

(*)Nuplex Resins (ex-Akzo Nobel Resins' product)

Mixing ratio of DURANATETM TLA-100 with polyols is based on NCO/OH equivalent ratio of 1/1 .

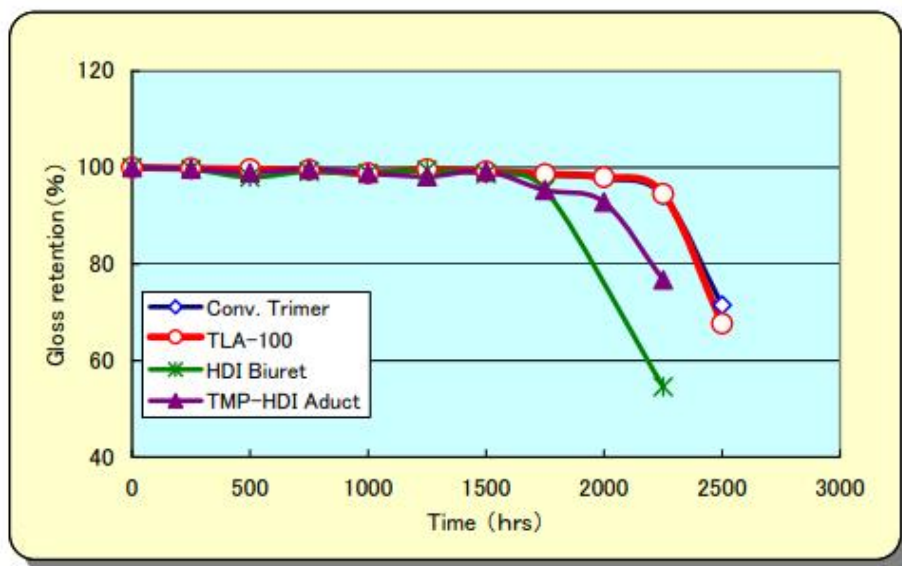
Development of gel fraction & hardness:



*Conv. Trimer; Conventional HDI-Trimer

*Paint formulation; Acrylic polyol (Setalux 1903), NCO/OH=1.0

Accelerated Weathering Test (Super Xenon) for Film cured with TLA



*Conv. Trimer; Conventional HDI-Trimer

Test Conditions for Super Xenon;
Black panel Temp. 63°C. Irradiation intensity; 180W/m²

Storage and Transportation:

STORAGE: It is recommended to store in a dry and cool area with proper ventilation.

Packaging:

200KG/drum Please fasten the packaging cover as soon as possible after original packaging to prevent the mixing of other substances such as moisture and other substances that may affect the performance of the product. Do not inhale dust, avoid skin and

mucous membrane contact. Smoking, eating and drinking are prohibited in the workplace. After work, shower and change clothes. Store contaminated clothes separately and reuse them after washing. Maintain good hygiene practices.

E_mail us : info@allhdi.com