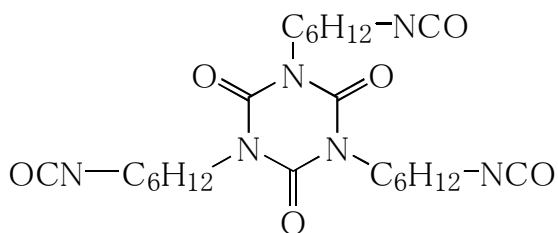


Type Aliphatic polyisocyanate (HDI Trimer)



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	23.3 wt%
Viscosity	500 mPa · s at 25°C
Color value	< 1 (Gardner)
NCO equivalent weight	Approx. 180
Flash point	190 °C
Relative density	1.15 (20 °C) (H ₂ O = 1)

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

Comparison with Conventional Trimer

	TLA-100	Conv. Trimer
Viscosity mPa · s/25°C	500	2,600
NCO content %	23.3	21.7
HDI conc. After 50°C · 1month	Low	Low
Weather resistance of cured film	Excellent	Excellent
Hardness of cured film	High	High

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

Compatibility with polyols

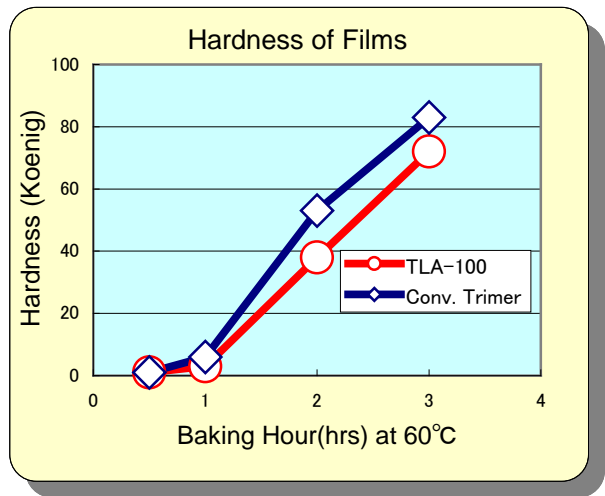
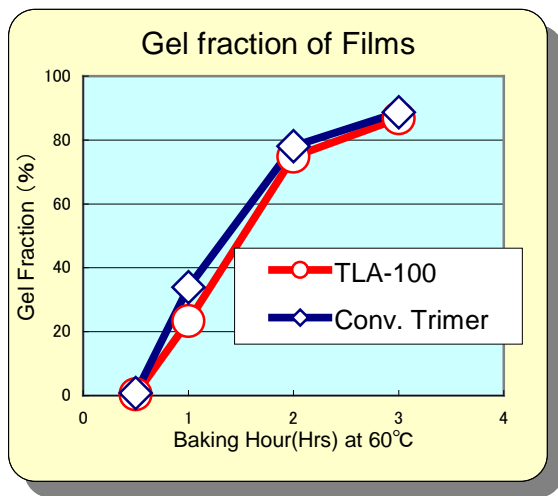
<u>With polyols</u>		<u>Resin solution</u>	<u>Dried film</u>
Acrylic	Setalux 1152(*)	+	+
	Setalux 1184(*)	+	+
	Setalux 1198(*)	+	+
	Setalux 1199(*)	+	+
	Setalux 1767(*)	+	+
	Setalux 1903(*)	+	+
Polyester	Setal 166(*)	+	+

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

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

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

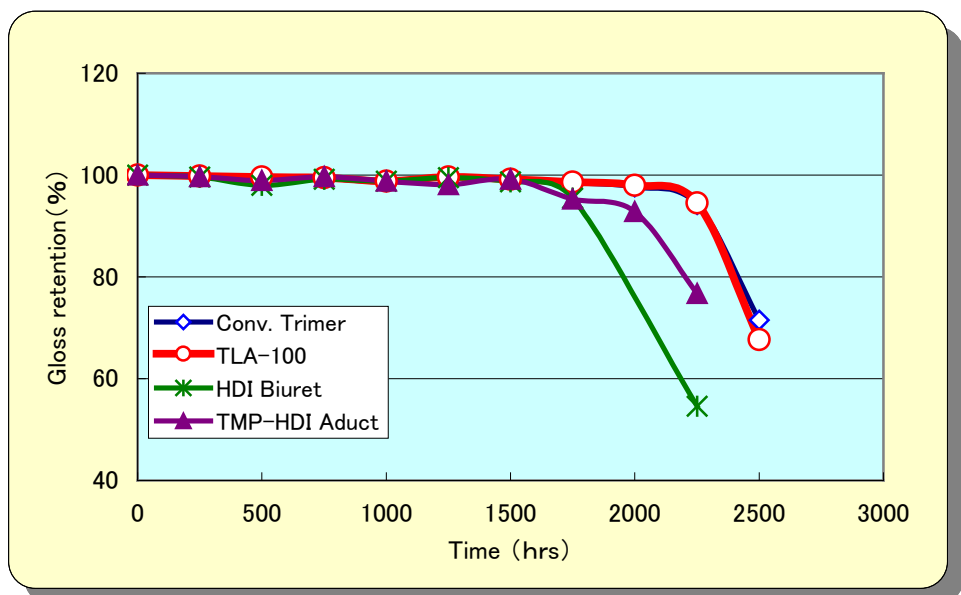
Development of gel fraction & hardness



*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

For further information:

ASAHI KASEI CORPORATION

Performance Coating Materials Division

1-105 Kanda Jinbocho, Chiyoda-ku, Tokyo101-8101 JAPAN

Tel: +81-3-3296-3331

Fax: +81-3-3296-3462

URL: <http://www.akcpc.jp/en/duranate/index.html>