



SYNTHALAT A 1633

Characteristics:

Acrylic resin cross-linking with polyisocyanate.

Supplied as:

A = 50% in xylene/butyl acetate (1:1)
B = 50% in butyl acetate
C = 50% in shellsol A/ethoxy propyl acetate (3:1)

Use:

In combination with aromatic and aliphatic polyisocyanates for fast drying 2-component polyurethane coatings, particularly suitable for coating furniture.

Properties:

	A	B	C
<u>hydroxyl value</u> (in-house method AV-F-H003)	60-75	60-75	60-75
<u>hydroxyl content</u> (relative to nvc)	ca. 2.0%	ca. 2.0%	ca. 2.0%
<u>viscosity in mPas</u> (as supplied) (in-house method AV-F-V005)	-----	-----	2,800 - 3,400
<u>flow time in sec.</u> (as supplied) (in-house method AV-F-V003)	160 - 200	100 - 140	-----
<u>Gardner colour value</u> (as supplied) (in-house method AV-F-F007)	< 2	< 2	< 2
<u>non-volatile content</u> (as supplied) (in-house method AV-F-F003)	50 +/- 1%	50 +/- 1%	50 +/- 1%
<u>flash point in °C</u> (as supplied) (in-house method AV-F-F006)	21	27	37
<u>density in g/ml</u> (as supplied) (in-house method AV-F-D001)	0.994	1.0	1.0

Properties and fields of use:

SYNTHALAT-A 1633 is a fast drying polymethacrylate, that permits manufacture of very quick drying 2-component coating systems. These coatings are suitable for industrial furniture coatings and other wood coatings.

The good compatibility with „Desmodur“ types HL and IL makes it possible to achieve a rapid stackability even without physical drying additives such as nitrocellulose.

The use of Cellit and NC with „Desmodur N and L“ also permits fast drying coatings with long pot lives.

Mixing ratio with polyisocyanate:

Assuming equivalent reaction of the reactive groups (NCO : OH = 1:1), the following formula applies for calculation of the amount of polyisocyanate to be added (relative to 100 parts by weight of SYNTHALAT-A 1633, solid):

$$\frac{42 \times 100 \times 2,0}{17 \times \text{NCO \%}}$$

42 = molecular weight of the NCO group
17 = molecular weight of the OH group
2.0 = hydroxyl content of SYNTHALAT-A 1633 in % relative to non-volatile components

