

## Product data

## Synolite 6518-A-1

**Applications**

Synolite 6518-A-1 is a transparent, flexible and tough solid product when cured. It is designed to be used with silane adhesion promoter as the interlayer in glass to glass laminations and is specifically designed for use in laminated safety glass.

**Principal properties**

The Synolite 6518-A-1 shows good film cure even at low interlayer thickness, with excellent low colour and high absorption of UV wavelengths below 380 nm. This absorption affords good protection from deterioration to sensitive items displayed behind windows. It has good tensile strength and water resistance of cured films. Synolite 6518-A-1 may be used in conjunction with certain light-fast translucent pigments or dyes to produce tinted interlayers.

**Typical physical properties of cast unfilled resin**

Property	Value	Unit	TM
Density, 25°C	1157	kg/m <sup>3</sup>	ISO 1183
Volume shrinkage	6.6	%	ISO 3521
Hardness, 25°C	80	Shore A	ISO 868
Tensile strength, 25°C	3.6	MPa	ISO 527-2
Tensile E-modulus, 25°C	12	MPa	ISO 527-2
Elongation at break, 25°C	160	%	ISO 527-2
Appearance, colourless, tough, flexible solid			

**Remarks**

1.0% medium reactivity MEKP 50% as initiator, curing 24 hours at 20-25°C followed by either 3 hours at 60°C or 4 days at 20°C.

Appearance is colourless tough flexible solid.

**Product specifications**

Property	Range	Unit	TM
Viscosity, 23°C	115 - 155	mPa.s	2013
Solids content, IR	60 - 63	%	2033
Refractive index, 23°C	1.520-1.524	-	2150
Density, 23°C	1.071-1.091	kg/l	2160
Gel time, 20°C with 1% M50 by volume	89 - 121	minutes	2247
Appearance	clear	-	2265
Acid value, as such	11 - 17	mg KOH/g	2401
Adhesion to glass, 1% silane A174 + 1% Butanox M50	2.5	N/mm <sup>2</sup>	2603
Colour, cured 3mm thickness	max. 1	G	4538
Hardness	70 - 85	Shore A	4538

**Other data**

Property	Value	Unit	TM
Stability at 20°C	3	months	-
Flash point	appr. 32	°C	2800

**Processing**

Designed to be used in conjunction with a silane adhesion promoter

**Guidelines before use**

Before use, the resin should be conditioned at a well defined, application dependent temperature (usually 15°C minimum for a MEKP / Co cure). Stir the product before blending.

**Storage guidelines**

The resin should be stored indoors in the original, unopened and undamaged packaging, in a dry place at temperatures between 5°C and 30°C.

Shelf life is reduced at higher temperatures. The shelf life of styrene containing unsaturated polyesters will be significantly reduced when exposed to light. Store in dark and in 100% light tight containers only.

**Material Safety**

A material safety data sheet for the product is available on request.

**Test methods**

Test methods (TM) referred to in the table(s) are available on request.