

SR TopClear 1054 / SD TopClear 1533 Finish coat

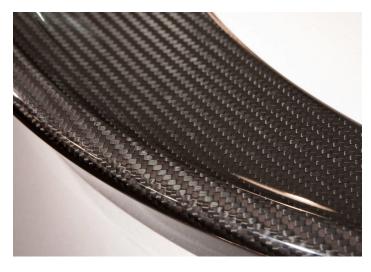
The **TopClear** system is a shiny, translucent or colored, resistant to UV, and 100 % solid product, brushable or sprayable.

Applications

- Finishing for cosmetic parts
- o Glass / hot coat
- Varnishing
- Surfacing
- o Laminating of small parts (tuning, scenery...)
- o Carbon « look »
- Light binding, non structural bonding
- Surf board repairs, fixing fin box
- Clear gel coat

Substrates

- Composites
- o Glass, carbon fabrics...
- o Paper, wardboard, leather
- o Foam (PVC, PU, PS...)
- Metal
- o Stone, marble, concrete...







Resin SR TopClear 1054

		SR TopClear 1054
Aspect and color		Colorless to light yellow liquid
Pt/Co color		< 250
Density (g/cm ³)	20 °C	1.07
	20 °C	1 600
Viscosity (mPa.s)	25 °C	970
	30 °C	620

Hardener SD TopClear 1533

		SD TopClear 1533		
Aspect and color		Colorless liquid		
Pt/Co color		< 40		
Density (g/cm ³)	20 °C	1.15		
	20 °C	1 000		
Viscosity (mPa.s)	25 °C	700		
	30 °C	500		

Mix SR TopClear 1054 / SD TopClear 1533

		SR TopClear 1054 SD TopClear 1533
Mixing ratio	By weight	100 / 66
	By volume	100 / 62
Viscosity (mPa.s)	20 °C	2 100
	30 °C	1 100
T _g onset max. (°C)		64



UV ageing – WOM Test

Test du	ration (h)	0	500	1 000	1 500
Glos	s 60°	90	92	92	92
Color	L	0	0	0	0
	а	0	0	0	0
	b	0	0	0	0
	dE	0	0	0	0

Indicative data on application for 150 µm film

At 20 °C	SR TopClear 1054 SD TopClear 1533 + 15 % ABu		
Pot life 300 mL	20 min		
Dust free	20 min		
Sandable / Overcoating min. time	1 h		

Surface preparation

Before application, the surface must be dried and cleaned, sanded with a 120 grain. Be carefull to have a surface free of substances that could interfere with the coating adhesion (waxes, oil, grease or surfactant).

In the case of lamination or a gelcoat application, please consult us in regards to the release agent treatment.

Use and application

Be carefull to mix well both components together quickly, respecting the mixing ratio recommended.

Application time without thinner: 5 min Minimum application temperature: 15 min

A small quantity of water can accelerate the polymerization. Prevent high humidity content, it can significantly reduce the use time, lower the clearness of the surface or favor the apparition of bubbles.

Thinner

For spray applications, dilute from 15 to 30 % straight after mixing both components.

Recommended thinner: Sicomin Thinner Abu

Nozzle diameter: 1.5 to 2 mm



Tests carried out on samples of pure cast resin, without prior degassing, between steel plates.

Measures undertaken according to the following norms:

Mechanical tests:

 Tension:
 NF EN ISO 527-2:2012

 Flexion:
 NF EN ISO 178:2011

Compression: NF EN ISO 604:2004 or NF EN ISO 844:2014 (foam product)

Charpy impact strength: NF EN ISO 179-1:2010
Shear Strength: ASTM D732–17 (Punch Tool)

Interlaminar shrinkage strength: ASTM D5528-13
Toughness (GIC et KIC): ISO 13586:2000

Water absorption: Internal. Polymerization according to cycle, machining, weighing, time

spent

in distilled water at 70 $^{\circ}\text{C}$ / 48 hours, weighing 1 hour after emerging,

Bonding Strength Double lap shear: ASTM D3528-96

ADH = adhesive failure COH = cohesive failure

TLC = thin-layer cohesive failure FT = fiber-tear failure.

light-fiber-tear failure

Thermal tests:

Glass transition DSC: NF EN ISO 11357-2:2014 -5°C to 180 °C under nitrogen gas

I FT =

T_{G1} or Onset: 1st scan at 20 °C/min

T_{G1} maximum or Onset: 2nd scan at 20 °C/min

Glass transition DTMA: Temperature ramp 0 °C to 180 °C @ 2°C/min under normal

atmosphere

NF EN ISO 11357-1:2016 T_G onset G' ASTM D4065-12 T_G peak G''

Physical tests:

Gardner color: NF EN ISO 4630:2016 Visual method

Refractive index: NF ISO 280:1999

Viscosity: NF EN ISO 3219:1994 Rheometer 50 mm, shear 10 s⁻¹

Density on liquids: ISO 2811-1:2016 Pycnometer
Density on solid: NF EN ISO 1183-3:1999 Helium Pycnometer

Density on foam: NF EN ISO 845:2009

Gel time: Cross G' G" Rheometer CP50 - Shear rate 10

s-1

Green Carbone content: ASTM D6866-16 or XP CEN/TS 16640 Avril 2014

TA: Ambient temperature (20 to 25 °C)
NC: No information Communicated

NB: No Breaking (maximum flexion deformation : 15 %)

UV test WOM-Test DIN EN ISO 16474-2 Peocess A1 Xenontest: WOM CI 4000 Atlas

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