

TopClear Systems TopClear / Gelcoat / Finish Coat

The TopClear Systems is a shiny, translucent or colored, resistant to UV, and a high build (100% solid) product.

Brushable or sprayable

Multiple media

- Wood
- Composites
- Glass, carbon Fabrics etc....
- Paper, cardboard, leather
- Foam (PVC, PU, PS....)
- Metal
- Stone, marble, concrete
- Others please consult us

Application

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



Physical characteristics

Resins SR TopClear 105x

		SR TopClear 1056	SR TopClear 1054
Reactivty		Fast	Slow
Nature		Resin	
Density	@ 20 °C	1.10	
Color		Clear	
Color Gardner		< 2	
Refractive index	@ 25 °C	1.4745	1.4749
Dry extract (%)		100	
Viscosity			
(<u>+</u> 20 % mPa.s)	@ 15 °C	2 500	2 800
	@ 20 °C	1 500	1 600
	@ 25 °C	900	970
	@ 30 °C	600	620
	@ 40 °C	250	280

Hardener SD TopClear 1533

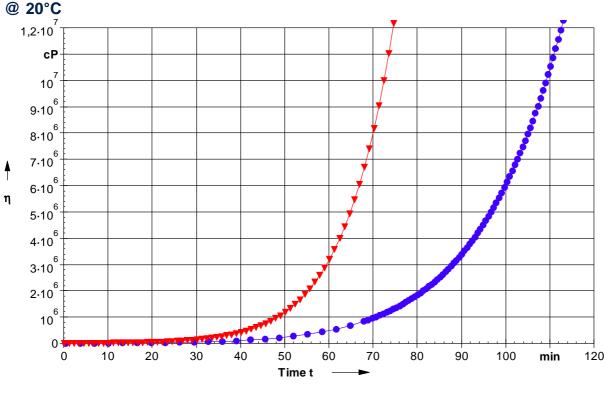
Nature	Hardener	
Color	Clear	
Color Gardner	< 2	
Refractive index @ 25 °C		1.5002
Dry extract (%)	100	
Density	@ 20 °C	1.15
Viscosity		
(<u>+</u> 20 % mPas)	@ 15 °C	1 500
	@ 20 °C	1 000
	@ 25 °C	700
	@ 30 °C	500
	@ 40 °C	300

Mix SR TopClear 105x / SD TopClear 1533

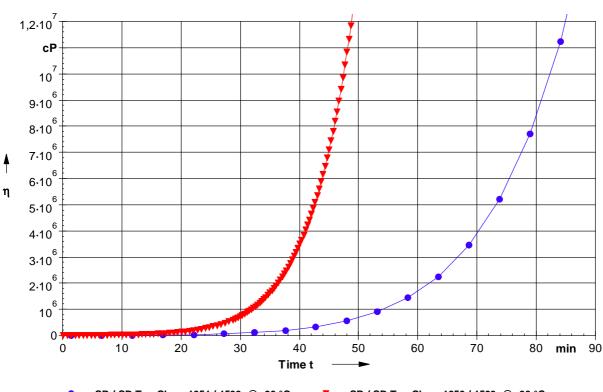
	SR TopClear 1056 / SD TopClear1533	SR TopClear 1054 / SD TopClear 1533
Mix ratio by weight Mix ratio by volume	100 / 66 100 / 62	
Initial Viscosity (±20 mPa.s)		
@ 20 °C	2 050	2 800
@ 30 °C	1 700	1 200
Glass transition Tg onset:by DSC (°C)		
Room temperature 24 hrs	60	60
Room temperature + 16 hrs @ 40 °C	75	66
Room temperature + 16 hrs @ 60 °C	85	80



Evolution of the viscosity on 1 mm film



@ 30 °C



→ SR / SD Top Clear 1054 / 1533 @ 30 °C → SR / SD Top Clear 1056 / 1533 @ 30 °C



Surface Preparation

The surface must be dry and clean, sanded with a 120 grain, with no dust or substance that could interfere with the adhesion, like for example: waxes, oil, grease or surfactant. In case of lamination or a gelcoat application, please consult us in regards to the release agent treatment

Use and application

Application Temperature: minimum 15 °C

Please shake before use.

Prepare the right quantity needed for the application

Mix well both components together quickly respecting the ratios.

Application time with no thinner: 5mn

Thinning / Solvent:

Thinner: SICOMIN Thinner Abu

Sprayable application: dilute from 15% to 30 % straight after mixing the resin and hardener

Nozzle diameter: 1.5 to 2 mm

Drying time @ 20 °C

	SR TopClear 1056 /	SR TopClear 1054
	SD TopClear 1533	SD TopClear 1533
Dust free :	20 min	40 min
Dry to the touch:	25 min	1 hr
Sanding when dry:	2 hrs 30'	3 hrs
Second coat:		
Minimum	30 mn	60 mn
Maximum without sanding	48 hrs	48 hrs

Kits Availables

SR TopClear 1054 Or SR TopClear 1056	SD TopClear 1533
1 kg	0.66 kg
4.5 kg	2.97 kg
15.15 kg	10 kg
151 kg	200 kg

SR TopClear 1054 Blanc	SD TopClear 1533
1.22 kg	0.66 kg
5.5 kg	2.97 kg
18.52 kg	10 kg
185 kg	200 kg

Others please consult us



Coloring

The TopClear system is compatible (10% maximum) with our coloring system "Color Paste" Available RAL:

Traffic Yellow 1023 -2011 -Orange 3001 -Red security Red signal 3020 -5015 -Sky Blue 6002 -Leaf Green 7045 -**Telegris** 9005 -Jet Black 9010 -Pure White

Other Colours please consult us

Safety precautions

Avoid contact with water and solvents before and after mixing
A small quantity of water can accelerate the polymerization process
A high humidity content can significantly reduce the use time and lower the clearness of the product (bubbles)

Please use protective items like gloves, masks, protective eyewear Please see Material Safety Data Sheets

Storage

After use, please close back tightly the packaging. Storage temperature between 5 °C and 25 °C

12 months in its original closed packaging, after that even if the use by date is over, it does not mean that the product cannot be used. Please call us.

Cleaning your work tools

Clean quickly your tools after use with the SICOMIN Thinner Abu Before polymerization wipe off and eliminate any traces with a solvent After polymerisation: mechanical cleaning

Chemical resistance

Good resistance to acids and weak bases. Limited resistance to organical solvents Others, please consult us



Tests carried out on samples of pure resin

Measures undertaken according to the following norms:

Glass transition DSC: ISO 11357-2: 1999 -5°C to 180°C under nitrogen gaz

Tg1 or Onset: 1st point at 20 °C/mn Tg1 maximum or Onset: second passage

Glass transition DTMA: ISO 11357-1 - TG onset G' Temperature ramp 0°C to 180 °C @ 2°C/min

ASTM D4065 - TG peak G"

Physical tests according standard ::

Gardner color: NF EN ISO 4630 Visual metod

Refractive index: NF ISO 280

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

Density: NF EN ISO 2811-1 Pyknometer

Gel time: Cross G' G" / rheometer CP50 - Shear rate 10 s⁻¹
GreenCarbon content: ASTM D6866 or XP CEN/TS 16640 Avril 2014

LEGAL NOTES:

The information given in writing or verbally, in the context of our technical assistance and our trials, do not engage our responsibility. They are given in good faith based on SICOMIN's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with SICOMIN's recommendations. So, we advise the users of SICOMIN products, to check by some practical trials they are suitable for the envisaged processes and applications. The customer's storage, the use, the implementation and the transformation of the supplied products, are not under our control and your responsibility only will respond for it.

SICOMIN reserves the right to change the properties of its products. All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data and tolerance may vary due to circumstances beyond our control.

If our responsibility should nevertheless be involved, it would be, for all the damages, limited to the value of the goods supplied by us and implement by the customer. We guaranty the non-reproachable quality of our products, in the general context of sales and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.