

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 SR TopClear 105x resins

		SR TopClear 1056 Incolore	SR TopClear 1054 incolore	SR TopClear 1052 incolore
Reactivity		Fast	Slow	Very slow
Aspect		Liquid		
Color		Clear to light yellow		
Gardner color	maximum	2	3	3
Pt-co color	maximum	200	300	300
Refractive index	@ 25 °C	1.4745	1.4749	1.4749
Dry extract	%	100		
Density	@ 20 °C	1.07		
Viscosity (± 20 % mPa.s)	@ 15 °C	2 500	2 800	3 180
	@ 20 °C	1 500	1 600	1 800
	@ 25 °C	900	970	1 080
	@ 30 °C	600	620	680
	@ 40 °C	250	280	300

SD TopClear 1533 hardener

Color		Clear
Gardner color		0
Pt-Co color maximum		50
Refractive index	@ 25 °C	1.5002
Dry	%	100
Density	@ 20 °C	1.15
Viscosity (± 20 % mPa.s)	@ 15 °C	1 500
	@ 20 °C	1 000
	@ 25 °C	700
	@ 30 °C	500
	@ 40 °C	300

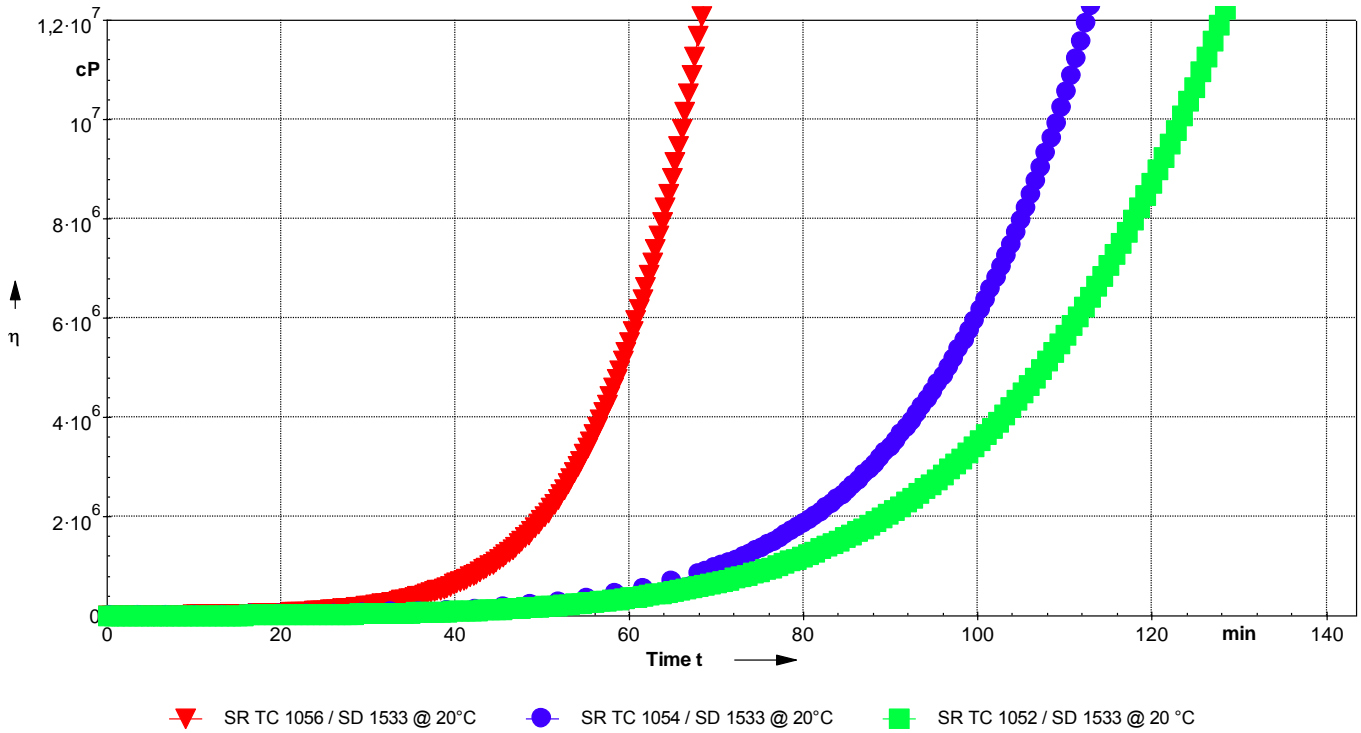
Blends SR TC 105x / SD TC 1533

	SR TC 1056 / SD 1533	SR TC 1054 / SD 1533	SR TC 1052 / SD 1533
Mixing ratio by weight by volume	100 / 66 100 / 62		
Viscosity (± 20 % mPa.s) @ 20 °C @ 30 °C	2 000 1 000	2 100 1 100	2 200 1 200
Gel time @ 20 °C @ 30 °C	50' 40'	80' 60'	105 ' 100'
Glass Transition / Tg onset (°C) 24 h @ AT TA +16 hrs @ 40 °C TA + 16 hrs @ 60 °C	60 75 85	60 66 80	52 62 70

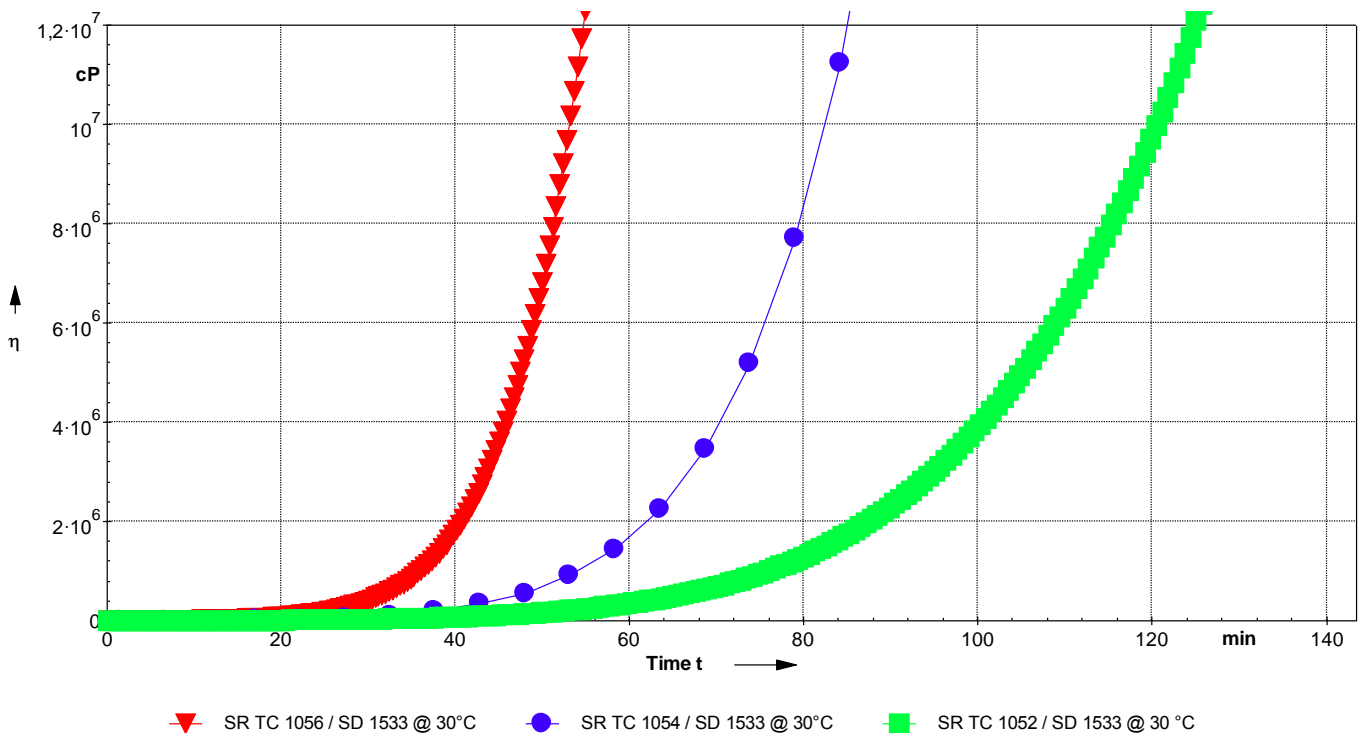
Indications on the parameters of application and use

	SR TC 1056 / SD 1533	SR TC 1054 / SD 1533	SR TC 1052 / SD 1533
Time off dust:	20'	40'	80 '
Dry sanding possible after :	2 h 30'	3 h 30'	4 h 30'
Second coat Minimum Maximum without sanding	30' 48 h	60' 48 h	90' 48 h

**Evolution of the viscosity on 1 mm film
@ 20°C**



@ 30 °C



UV ageing - WOM-Test

		Test duration			
		0 h	500 h	1000 h	1500 h
Gloss 60°		90	92	92	92
Color :					
	L	0	0	0	0
	a	0	0	0	0
	b	0	0	0	0
	dE	0	0	0	0

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

Coloring

SR TopClear 1054 black	Mixing ratio with SD 1533
SR TopClear 1054 white	100 g / 54 g by weight
	100 ml / 58 ml by volume
SR TopClear 1056 white	

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

1023 –	Traffic Yellow
2011 -	Orange
3001 –	Red security
3020 -	Red signal
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 cast resin, without prior degassing, between steel plates.
 Measures undertaken according to the following norms:

Tensile:	ISO 527-2	
Flexion:	ISO 178	
Compression:	ISO 604	
Shear:	ASTM D732-93	
Charpy impact strength:	NF T 51-035	
DSC glass transition:	ISO 11377-2:1999 -5°C to 180°C under nitrogen gas	
	T_{G1} or Onset:	1 st run at 20 °C/min
	T_{G1} maximum or Onset:	2 nd run at 20 °C/min
Glass transition DTMA:	ISO 11357-1 - T_G onset G'	Temperature ramp 0°C to 180 °C @ 2°C/min
	ASTM D4065 - T_G peak G''	Temperature ramp 0°C to 180 °C @ 2°C/min
Density:	ISO 2811-1	
Viscosity:	ISO 3219 - Rheometer - CP 50 mm - Shear rate 10 s ⁻¹	
Gel time:	Crossing of the G'G' curves method	
GreenCarbon content:	ASTM D6866 or XP CEN/TS 16640 Avril 2014	
UV test	WOM-Test DIN EN ISO 16474-2 Peocess A1	Xenontest : WOM CI 4000 Atlas

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