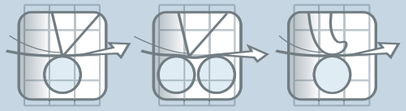
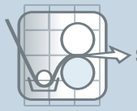
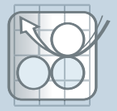


Knife

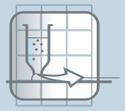
Gravure



Size Press Impregnation

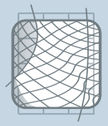


Transfer



Nozzle extrusion

Spray



Screen printing

From process…

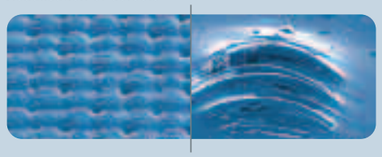
Optimise your coating process to achieve the highest performance possible.

Rhodorsil® TCS systems are engineered taking into account the specifications of the textiles and the interaction with the various coating techniques in order to maximise the value added by the coating.

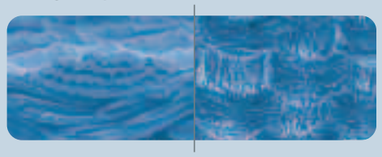
Bluestar Silicones's design capabilities are enhanced by our expertise in rheology and fluid mechanics in conjunction with in-house pilot coating lines available for customer testing. Optimisation on a pilot coating line offers the ability to monitor the silicone behavior upon mixing, coating and curing, prior to scaling-up to production coating. Bluestar Silicones's flexible chemistry and applications expertise enable you to shorten development time, bringing new products to market faster.

We understand how processing affects your final performance and makes the difference!

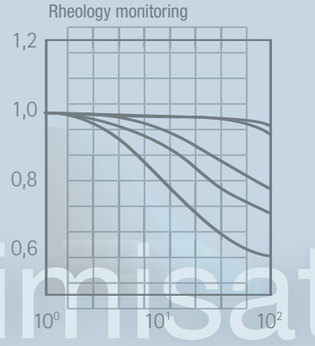
Visualisation of defects



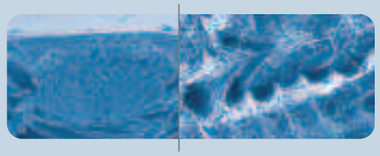
Coverage Analysis



Rheology monitoring



Penetration, visible imprint of the textile



Characterisation

Visualisation

Optimisation

to performance

In the field of technical textiles, pushing the performance boundaries is critical to meet the extreme requirements of tomorrow.

Rhodorsil® TCS series provide excellent barrier protection against chemical and environmental aggression, such as fire, heat, radiation, moisture, ageing and mechanical stress.

We can help you differentiate your product line! Paving the way to new technical fields is our mindset... to push the limit of existing and conventionally-accepted technologies.

Our experts commit to investigate your unmet performances and assist in defining what can best suit your process and product requirements.

BLUESTAR SILICONES

SIL|07|005|3|TCSSeries 1

RHODORSIL® TCS series

Product name	Technology	Appearance	Most suitable processes	Mix ratio (A:B)	Low weight coating (<0,05 mm)	Suitable for thick coating (>0.1 mm)	Suitable for high processing speed	Suitable for adhesion to substrate	Thermal protection	Flame protection	Low friction	Physical protection	Attributes	Viscosity (mPa.s)	Cure rate at 150°C (approx) in min*	Skin formation time (room temperature) in min	Shore A hardness	Tensile strength (Mpa)	Elongation at break (%)	Tear strength (kN/m)	Specific gravity
RHODORSIL® TCS 7001	Dispersion	yellowish	Spray, impregnation	1	●	○	○	●	○	○	●	●	Durable water repellency and wet abrasion resistance - low water uptake - soft handling	3,5 mm²/s	3 to 5						
RHODORSIL® TCS 7002	Dispersion	yellowish	Spray, impregnation	1	●	○	○	●	○	○	●	●	Durable water repellency and wet abrasion resistance - low water uptake -soft handling	3,5 mm²/s	3 to 5						
RHODORSIL® TCS 7110	Waterbased	trans	Spray, impregnation	10:1	●	○	●	○	◐	●	●	○	Enhance tear strength, low water uptake, good fire retardancy	140	1 to 3	-	-	-	-	-	-
RHODORSIL® TCS 7112 EX	Waterbased	off-white	Gravure	10:1	●	○	●		○	◐	●	○	Low friction - adhere to silicone layer - printable	tunable	1 to 3	-	-	-	-	-	-
RHODORSIL® TCS 7311	dispersion	white	Nozzle extrusion, screen printing	1	●	○	○	◐	◐	●	◐	●	Anti-slip, large operating temperature, food innocuity	7 000	-	-	30	3	250		
SILBIONE® TCS 7350	RTV1 PC	trans	Nozzle extrusion, screen printing	1	○	●	○	○	○	◐	○	◐	Anti-slip, Oko-Tex 100 compliance, skin-innocuity	90 000	-	8	26	1,2	300	3	1,04
SILBIONE® TCS 7370	RTV1 PC	trans	Nozzle extrusion, screen printing	1	○	●	○	◐	○	◐	○	●	Rapid cure at RT, high translucency, anti-slip for medical stockings, laces, gloves etc. Oko-Tex 100 compliance; skin innocuity	150 000	-	8	21	2,2	500	5,5	1,01
RHODORSIL® TCS 7371	RTV1 PC	trans	Knife, extrusion	1	○	●	○	●	◐	●	○	●	Thermal protection coating / sealing adhesive / sealing joints / good dielectric properties / anti-slip	250 000	-	10	35	3,8	290	4,5	1,16
RHODORSIL® TCS 7510	LSR	Blue	Knife, screen printing, impregnation, roll transfer	10:1	◐	○	●	●	●	●	○	○	Drastically increase tear resistance, fast cure, excellent adhesion of polyamide and polyester	12 000	1 min	-	25	2	190	3	1
RHODORSIL® TCS 7513	LSR	Trans	Knife, impregnation, roll transfer	10:1	◐	○	●	●	○	◐	○	○	Low viscosity for impregnation, adhesion to glass, polyamide, polyester fabrics	2 500	1 min	-	20	2	150	-	1
RHODORSIL® TCS 7514	LSR	Off-white, red	Knife, screen printing	1:1	◐	○	◐	◐	●	●	●	◐	Heat and fire protection, high temperature resistance, strong adhesion to glass.	22 000	1 min at 160°C	-	35	5	400	8	1,12
RHODORSIL® TCS 7530	LSR	Off-white, blue	Knife, screen printing, roll transfer	10:1	◐	◐	●	◐	○	○	●	○	Heat resistance, fire protection	35 000	1 min	-	36	3	150	4	1,19
RHODORSIL® TCS 7531	LSR	trans blue	Knife, roll transfer	10:1	●	○	●	●	●	◐	○	●	Fast cure, high tear resistance, thermal protection and strong adhesion	42 000	1 min	-	29	3,5	250	9	1
RHODORSIL® TCS 7532	LSR	trans	Knife	1:1	●	○	●	●	●	◐	○	●	Fast cure, process ease, high thermal resistance and strong adhesion	42 000	1 min		35	3,5	250	9	1
RHODORSIL® TCS 7533	LSR	off-white	Knife, roll transfer	10:1	●	○	●	●	●	◐	◐	◐	Fast cure, good adhesion and heat protection, excellent release properties	25 000	1 min	-	46	5	150	6	1
RHODORSIL® TCS 7534	LSR	off-white, blue, red	Knife, screen printing, roll transfer	10:1	●	◐	●	●	●	●	●	●	High process speed, physical protection, fire protection, thermal protection	45 000	1 min	-	40	5	200	12	1,1
RHODORSIL® TCS 7535	LSR	gray, red	Knife, screen printing	10:1	◐	●	●	○	●	●	◐	●	Heat protection	60 000	1 min	-	47	5,5	200	13	1,2
RHODORSIL® TCS 7536	LSR	trans	Knife, roll transfer	10:1	◐	○	●	●	●	◐	○	●	temperature resistance and humidity resistance - strong adhesion, autoclavable textiles	42 000	1 min	-	32	3,8	200	9	1
RHODORSIL® TCS 7550	LSR	off-white, blue	Knife, screen printing	1:1	◐	●	◐	●	●	●	●	●	Bonding strength, Heat insulation, strong adhesion to silicone coating / glass / polyamide, polyester	60 000	1 min	-	50	5,5	300	13	1,25
RHODORSIL® TCS 7552	LSR	white	Knife, screen printing	10:1	○	●	◐	○	●	◐	○	●	Heat protection / fire restistance / high elasticity	50 000	1 min	-	20	5	550	18	1,1
RHODORSIL® TCS 7750 EX	LSR	trans	Knife	1:1	◐	●	◐	◐	●	●	○	●	Very high strength adhesion to polyamide	140 000	1 min	-	50	6,3	350	40	1,15
RHODORSIL® TCS 7970	HCR	trans	-	1				●	●	●		●	High bonding strength	-	2 min at 180°C	-	45	7,5	600	37	1,1

Ranking: ● ideally suited ● ● good performance ○ ◐ not ideal

Product portfolio

Region availability may vary and in certain cases restrictions may apply, please consult your local representative for details.
*Cure rate may be increased by increasing curing temperature in certain cases.