

Application guide

Examples of use											
Airbag coatings	Fire & thermal protection	Architectural coatings	Glass braids	Peel ply	Medical and PPE	Conveyor belts	Lace & elastic	Removable non-slip coating	Durable water resistance	Ink matrices	Bonding
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TCS product range

TCS products for technical textiles

Surface treatments / ultra thin coatings	Processing characteristics									Physical characteristics				Key features	
	Technology and mix ratio	Cure rate	Viscosity at 10s ⁻¹ , cP	Recommended process					Base appearance	Sh A Hardness	Elongation at break (%)	Pot life (h)	Adhesion		
				Roll transfer	Knife	Impregnation	Nozzle extrusion	Spray							Screen printing
Bluesil™ TCS 7513	10 : 1	1 min 150°C	3,000	▲	▲	▲				Trans	36	150	>16	Multisubstrates	Very low viscosity. Primerisation of surfaces, yarns protection. 100% dry matter
Bluesil™ TCS 7001	Dispersion	3 min 150°C	3.5 mm ² /s			▲		▲		Trans	-	-	-	Multisubstrates	Durable Water Repellency and wet abrasion resistance, soft handling
Bluesil™ TCS 7110	Waterbased 10 : 1	1 min 150 °C	140			▲		▲		Trans	-	-	>16	Multisubstrates	Waterbased silicone elastomer emulsion for thin coatings and textiles impregnations
Bluesil™ TCS 7311	Dispersion	/	7,000				▲	▲	▲	Off-white	30	250	-	Multisubstrates	Large operating temperatures, food innocuity
Bluesil™ TCS 7011	3 components	< 1 min 150°C	400		▲					Trans			24	Siliconized fabrics	Top coat. Ease of cleaning, good slip

Textile coating systems	Processing characteristics									Physical characteristics				Key features	
	Technology and mix ratio	Cure rate	Viscosity at 10s ⁻¹ , cP	Recommended process					Base appearance	Sh A Hardness	Elongation at break (%)	Pot life (h)	Adhesion		
				Roll transfer	Knife	Impregnation	Nozzle extrusion	Spray							Screen printing
Bluesil™ TCS 7517	10 : 1	1 min 150°C	19,000	▲	▲					White	32	200	>16	Multisubstrates	Good balance tear strength / edgecomb resistance, high adhesion onto polyamide substrates
Bluesil™ TCS 7531	10 : 1	1 min 150°C	33,000	▲	▲				▲	Trans	30	230	>16	Multisubstrates	General purpose trans
Bluesil™ TCS 7534	10 : 1	1 min 150°C	42,000	▲	▲				▲	White	44	200	>16	Multisubstrates	Excellent compromise on the mechanical properties
Bluesil™ TCS 7537	10 : 1	1 min 150°C	38,000	▲	▲				▲	White	33	200	>16	Multisubstrates	Excellent adhesion onto synthetic fibers and ageing resistance
Bluesil™ TCS 7550	1 : 1	1 min 150°C	60,000		▲				▲	Off-white	52	200	>16	Multisubstrates	Excellent insulation and fire resistance. Good bonding onto coated and uncoated fabrics
Bluesil™ TCS 7552	10 : 1	1 min 150°C	50,000	▲	▲				▲	Off-white	24	550	>16	Glass	High physical profile, high elongation

Thick coatings / bonding materials	Processing characteristics									Physical characteristics				Key features	
	Technology and mix ratio	Cure rate	Viscosity at 10s ⁻¹ , cP	Recommended process					Base appearance	Sh A Hardness	Elongation at break (%)	Pot life (h)	Adhesion		
				Roll transfer	Knife	Impregnation	Nozzle extrusion	Spray							Screen printing
Silbione® TCS 7370 OC	RTV 1	/ ⁽¹⁾	170,000				▲			Trans	20	450	-	Multisubstrates	Fast cure at room temperature, soft complies with Oeko-Tex 100, and Silbione® labels. Very good on elastic and stretch supports
Silbione® TCS 7560	10 : 1	5 min 90°C	120,000				▲		▲	Trans	15	700	2.5	Narrow webs, open fabrics	Soft, high translucency, complies with Oeko-Tex 100 and Silbione® labels. Very good on elastic and stretch supports
Silbione® TCS 7561	10 : 1	5 min 90°C	150,000				▲		▲	Trans	3	1000	2.5	Narrow webs, open fabrics	Soft with tackiness, high elongation, high translucency, complies with Oeko-Tex 100 and Silbione® labels. Very good on elastic and stretch supports
Silbione® TCS 7772	1 : 1	2 min 130°C	220,000				▲		▲	Trans	20	575	48	Multisubstrates, narrow webs, open fabrics	High viscosity, long pot life, high translucency, high mechanical properties, complies with Oeko-Tex 100 and Silbione® labels. Very good on elastic and stretch supports
Bluesil™ TCS 7770	1 : 1	3 h RT	450,000				▲			Blue	8	1300	0.5	Siliconized fabrics	Good adhesion on silicone coated fabrics. Seam sealing properties
Bluesil™ TCS 7970	HCR	1 min 180°C ⁽²⁾	/							Trans	45	650		Multisubstrates fabrics-coated and uncoated fabrics	Excellent bonding strength

(1): cure rate will vary with temperature and humidity levels.
 (2): pressure and temperature are required to process this product and to obtain the right bonding performances.

Notes