



SILICONES FOR NARROW FABRIC COATINGS

Elastic. More elastic!

CHT
SMART CHEMISTRY
WITH CHARACTER.

ALPATEC SILICONES

For narrow tape coatings

Modern textiles often require an invisible hold, so that the carrier can move freely or the textile fulfils its function. With their sticky, transparent properties silicone elastomers applied at the right spots facilitate a high wear comfort of textiles and keep them in their correct position.

Silicone elastomers are applied onto the textile articles via narrow tape coating. One component (RTV 1) systems are widely used, as well as two component (RTV 2) systems.

One-component RTV 1 silicones

- ◆ Immediately ready for use. Blending is not necessary
- ◆ Good adhesion
- ◆ Crosslinking at room temperature (moist crosslinking)
- ◆ No inhibition
- ◆ Formation of decomposition products
- ◆ Exhaust systems required
- ◆ Shrinkage due to the condensation reaction
- ◆ No deep hardening
- ◆ Processing time (pot life) is usually very short. Skin formation after few minutes
- ◆ Fulfils Oeko-Tex® Standard 100

Two-component RTV 2 silicones

- ◆ Thorough blending and good exhaust system are required
- ◆ Adhesion may be improved furthermore by adding a primer
- ◆ Crosslinking at high temperature (heat)
- ◆ Inhibition risk (amines, polyurethanes, epoxide resins, substances containing sulphur, organometallic compounds such as tin compounds)
- ◆ No formation of decomposition products
- ◆ Shrinkage < 1 %
- ◆ Deep hardening by hot vulcanizing
- ◆ Processing time (pot life) can be adjusted
- ◆ For various application techniques (including screen and rotary printing)
- ◆ Surface sticky coatings possible
- ◆ Fulfils Oeko-Tex® Standard 100

Dot coating

RTV 1 component silicone is applied directly on the tapes out of a closed system by means of a special coating head. The silicone threads which are formed are rebuilt in seconds and form regular dots. Excess silicone is removed from the application cylinder and can be used again.

Standard recommendation:
ALPATEC 530, ALPATEC 730
ALPATEC 545, ALPATEC 745

Sticky coating

In order to obtain a stronger sticking effect of the garters on skin, a silicone with a permanently tacky surface is applied. This tackiness can be obtained only with special 2-component-silicones. Variations of the mixing ratios allow to modify the stickiness (higher amount of component A = stickier, more of component B = less sticky but better mechanical effect).

Standard recommendation:
ALPATEC 30203 A / ALPATEC 30203 B

Additives

SILICON REMOVER

It is applied to dissolve already cross-linked silicone again and to remove it (E. g. to clean pipelines, nozzles and working equipment).

KÖRAFORM TM

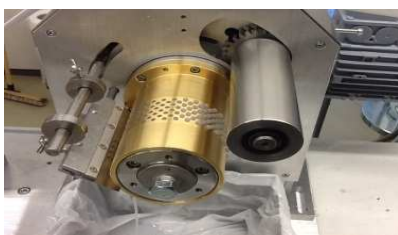
Thixotropic agent for silicone systems. To increase viscosity and to modify the flowing properties.

ALPA-OIL 50

Silicone oil to lower viscosity and to modify the flowing properties.

COLORMATCH SI colour range

Colour range for silicone systems.



Coating head for dot coating



Dot coating with ALPATEC 745



Tape coating with ALPATEC 740

ALPATEC SILICONES

For narrow tape coatings

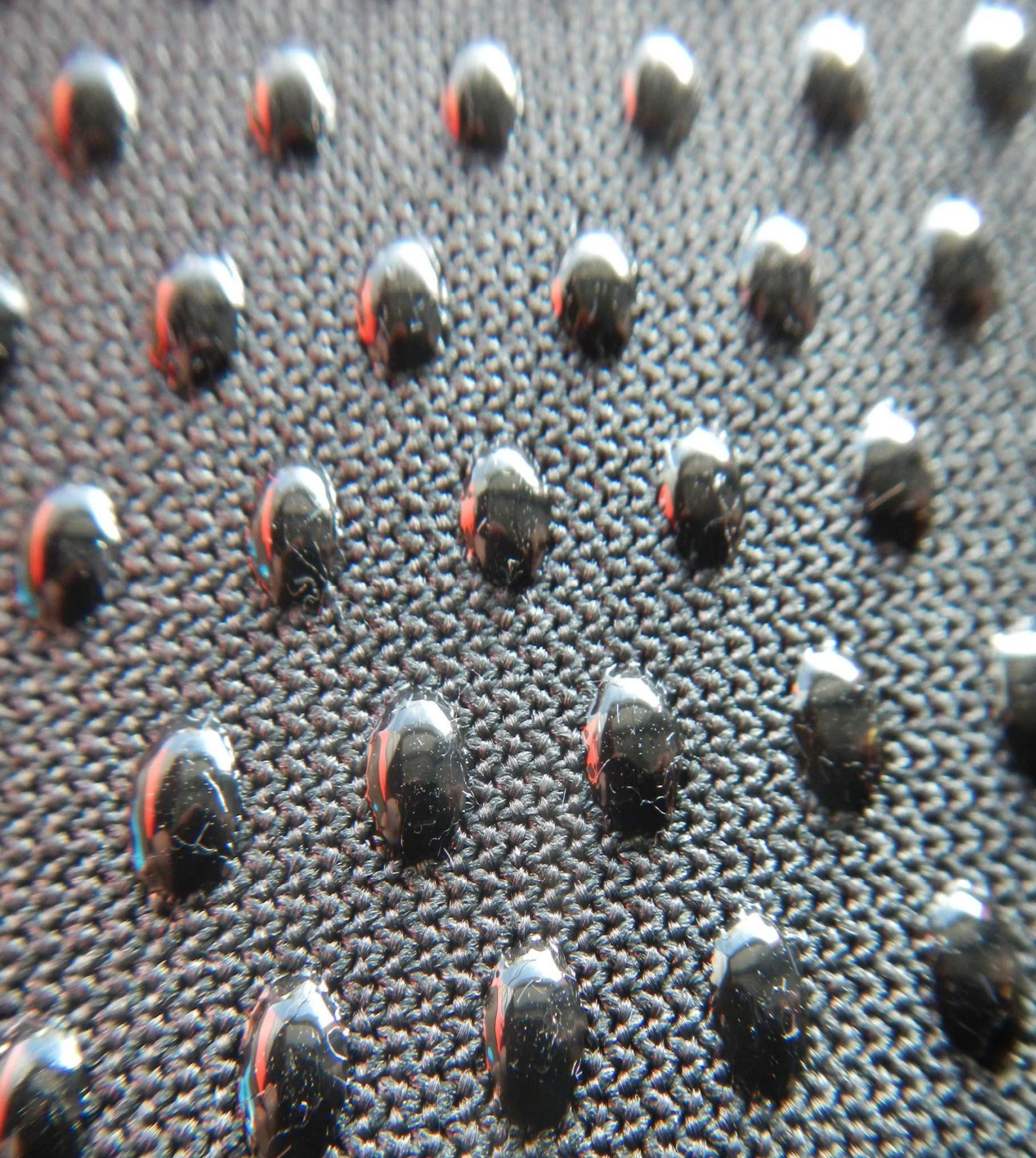
One component RTV 1 silicones

Product	Aspect	Running mm	Skin building time min	Hardness Shore A	Tensile strength N/mm ²	Elongation at break %	Resistance to further tearing N/mm ²
ALPATEC 312	transparent		6	30	2.7	400	
ALPATEC 313	transparent		15	23	1.8	370	
ALPATEC 314	div. colours		9	40	4	330	
ALPATEC 530	transparent	60	8.3	19	1.6	450	3.3
ALPATEC 540	transparent	63	4	17	1.7	480	3.5
ALPATEC 545	transparent	70	10	17	1.8	480	3.5
ALPATEC 550	transparent	70	7	20	2	490	3.5
ALPATEC 5610/60 C2	transparent	75	8	20	1.7	350	
ALPATEC 730	transparent	60	5	18	1.6	450	3
ALPATEC 740	transparent	63	4	17	1.7	480	3.5
ALPATEC 745	transparent	70	10	17	1.8	480	3.5
ALPATEC 750	transparent	60	8	20	1.8	480	3.5
ALPATEC 7610/60 C2	transparent	80	8	22	1.7	300	

tin-free

Two-component RTV 2 silicones

Product	Viscosity mPas		Mixing ratio A : B	Potlife h	Hardness Shore A	Tensile strength N/mm ²	Elongation at break %	Resistance to further tearing N/mm ²
	Component A	Component B						
ALPATEC 30050	100,000	3,000	10 : 1	24	50	6	200	8
ALPATEC 30142	60,000	600	10 : 1	10	32	5.3	300	14
ALPATEC 30143	70,000	70,000	1 : 1	10	25	4	300	10
ALPATEC 30191	70,000	74,000	1 : 1	1	22	5.3	510	14
ALPATEC 30191 TZ: 10H B	70,000	74,000	1 : 1	10	22	5.3	510	14
ALPATEC 30203	70,000	65,000	1 : 1	5	14	3	400	5
ALPATEC 30340	80,000	80,000	1 : 1	24	42	6	250	10
ALPATEC 3040 LSR	100,000	100,000	1 : 1	72	40	6.5	500	25
ALPATEC 3060 LSR	110,000	110,000	1 : 1	24	60	7	300	7



CHT
SMART CHEMISTRY
WITH CHARACTER.

CHT Germany GmbH | Bismarckstraße 102 | D-72072 Tübingen | Tel +49 7071 154-0 | Fax +49 7071 154-290 | www.cht.com | print-flock@cht.com

04/2018