

Wencon physical properties - S.I metrics system

	Wencon Cream	Wencon Rapid	Wencon Coating white+blue	Wencon Hi-Temp yellow+green	Wencon Putty	Wencon Pipe Tape	Wencon Exhaust Repair kit	Wencon UW Cream	Wencon UW Coating orange+brown	Wencon UW Coating LV	Wencon UW Putty	Wencon Ceramic Cream	Wencon Ceramic Coating grey+green
Max. Temperature	+60 - +250°C	+60 - +250°C	+60 - +250°C	+160 - +300°C	+60 - +250°C	+120°C	Up to +1000°C (1832°F)	+60 - +160°C	+60 - +160°C	+60 - +160°C	+60 - +95°C	+200 - +300°C	+220 - +320°C
Consistency	paste	paste	fluid	fluid	putty		fluid	paste	fluid	fluid	putty	paste	fluid
Mixing ratio vol.	1:1	1:1	1:2	1:2	-		No mixing.	1:2	1:2	2:1	1:1	1:2	1:2
Apply with	spatula	spatula	spatula/brush	spatula/brush	hand/spatula	hand	see prod. Info.	spatula	spatula/brush	Spray	hand/spatula	spatula	spatula/brush
Potlife at 20 C.	30-60 min. Mixed in small amounts	10-20 min. mixed in small amounts	20-30 min. mixed in small amounts	20-40 min. mixed in small amounts	3-6 min. mixed in small amounts	4-6 min.		25-30 min. mixed in small amounts	25-35 min. mixed in small amounts	15-20 min. in nozzle	25 minutes	30-40 min. mixed in small amounts	20-30 min. mixed in small amounts
Curing time	10 - 15 hrs	40 - 90 min.	10 - 15 hrs	10 - 24 hrs	10 - 20 min.	10 - 30 min.	Initial curing 3-4 hrs	10 - 18 hrs	10 - 18 hrs	10-18 hrs.	10 - 18 hrs	10 - 15 hrs	10 - 15 hrs
Machinability	yes	yes	yes	yes	yes		yes	yes	yes	yes	yes	yes	yes
Hardness shore D	75	81	80	82	85	N/A	N/A	79	79	80	76	80	81
Tensile strength Rcrack	14,30 N/mm²	9,20 N/mm²	12,90 N/mm²	13,80 N/mm²	4,60 N/mm²	172 N/mm²	N/A	35,80 N/mm²	37,50 N/mm²	37,00 N/mm²	17,6 N/mm²	25,80 N/mm²	25,40 N/mm²
Compressive strength Rcrack	58 N/mm²	112 N/mm²	95 N/mm²	96 N/mm²	35,14 N/mm²	180 N/mm²	N/A	134 N/mm²	133 N/mm²	130 N/mm²	25,30 N/mm²	65,10 N/mm²	124 N/mm²
Compr.strength modulus of elasticity	1.689 N/mm²	2.891 N/mm²	2.199 N/mm²	4.284 N/mm²	NA		N/A	2.631 N/mm²	3.117 N/mm²	3.282 N/mm²	3.400 N/mm²	2.799 N/mm²	3.030 N/mm²
Shear adhesion *	14,40 N/mm²	20 N/mm²	16,20 N/mm²	22,40 N/mm²	4,50 N/mm²	19 N/mm²	N/A	33 N/mm²	31,90 N/mm²	31,1 N/mm²	15,90 N/mm²	30,80 N/mm²	28,90 N/mm²
Adhesion to steel **	>3,0 N/mm²	2,0 N/mm²	6,0 N/mm²	3,4 N/mm²	>4,5 N/mm²		N/A	>7,5 N/mm²	>7,5 N/mm²	>7,5 N/mm²	>6,5 N/mm²	6,7 N/mm²	4,5 N/mm²
Specific volume	775 cm³ / kg	709 cm³ / kg	730 cm³ / kg	680 cm³ / kg	500 cm³ / kg		735 cm³ / kg	526 cm³ / kg	535 cm³ / kg	524 cm³ / kg	556 cm³ / kg	538 cm³ / kg	658 cm³ / kg
Heat resistance													
Corrosion	60°C (140°F)	60°C (140°F)	60°C (140°F)	160°C (320°F)	60°C (140°F)	120°C (248°F) peak 190°C (374°)		60°C (140°F)	60°C (140°F)	60°C (140°F)	60°C (140°F)	200°C (392°F)	220°C (428°F)
Light or no load	120°C (248°F)	120°C (248°F)	120°C (248°F)	220°C (430°F)	120°C (248°F)			100°C (212°F)	100°C (212°F)	100°C (212°F)	95°C (199°F)	250°C (482°F)	260°C (500°F)
For filling only	250°C (482°F)	250°C (482°F)	250°C (482°F)	300°C (570°F)	250°C (482°F)			160°C (320°F)	160°C (320°F)	160°C (320°F)	95°C (199°F)	300°C (572°F)	320°C (608°F)
Dielectric strength	10 KV/mm	10 KV/mm	10 KV/mm	10 KV/mm	N/A	N/A		10 KV/mm	10 KV/mm		N/A	N/A	10 KV/mm

Hardness	Shore D, DIN 53505
Tensile strength	N/mm² (10kg/cm²) DIN 53454
Compressive strength	N/mm² DIN 53454
Shear adhesion *	Single-lap-joint acc. to ASTM D1002
Adhesion to steel **	N/mm² (10kg/cm²) / ISO 4624
Specific volume	cm³ per kilogram