

KØLEPROFILER

TERMISK LEDENDE MATERIALE



**SARCON®
GREASE TYPE**

NEWTRONIC

SARCON® THERMALLY CONDUCTIV GREASE TYPE

SARCON® SG-07SL and SG-26SL are highly thermally conductive, non-reactive silicone-based greases that offer low thermal resistance and maintain a nonflowable composition. Unique binding agents and product formulation ensure the lowest amount of bleed and evaporation. Suited for thin bond line applications.

SARCON® SG-07NS, SG-26NS and SG-42NS are non-silicone, polysynthetic-based thermal greases that have high thermal conductivity properties. Infused with heat-conductive metal oxides, this nonmigrating material operates consistently in high temperatures. SARCON® nonsilicone greases offer all the benefits of a silicone-based compound without the problem of contamination.

FEATURES

- Silicone and non-silicone formulations.
- Thermal conductivity up to 2.6 W/m-K.
- Low bleed and evaporation.
- No migration for non-silicone formulations over wide temperature range.
- Non-toxic.
- Thin bond lines 25µm(1mil).
- Easy to apply and re-work.

APPLICATION

- Standard de/de power converter and de/ae inverter
- High performance CPUs
- Between any heat generating semiconductor and heat sink
- Custom power modules
- Telecommunications and automotive electronics

PACKAGING OPTIONS

- Pre-filled syringes : 3cc (6g), 10cc (28g), 30cc (72g)
- Jar containers : 1 lb. (454g)
- Custom packaging: Available on request

TYPICAL PRODUCT PROPERTIES

Test Properties		Unit	SG-07SL	SG-26SL	SG-07NS	SG-26NS	SG-42NS
Physical Properties	Type	–	Silicone	Silicone	Non-Silicone	Non-Silicone	Non-Silicone
	Specific Gravity,@25°C	–	2.2	2.2	2.4	2.2	2.4
	Color	–	White	Gray	White	Gray	Gray
	Viscosity*	Pa-s	160	406	250	480	502
		Cps	160,000	406,000	250,000	480,000	502,000
	Flow Rate**	g/min	95	6	75	8	6
	Evaporation, @ 200°C, 24hrs.	%Wt	0.52	0.44	0.68	0.5	0.46
Thermal Properties	Thermal Conductivity	W/m-K	0.75	2.6	0.75	2.6	4.2
Electrical Properties	Volume Resistivity	Ohm-cm	2.1x10 ¹⁴	2.8x10 ¹⁴	1.4x10 ¹⁴	2.1x10 ¹⁴	1.8x10 ¹⁴
	Dielectric Strength	kV/mm	15.4	16.5	12.6	15.7	8.8
		volts / mil	386	412	314	392	219
Operating Temperature Range	°C	-55 to 205	-55 to 205	-55 to 200	-55 to 200	-55 to 200	-55 to 200
	°F	-67 to 401	-67 to 401	-67 to 392	-67 to 392	-67 to 392	-67 to 392

* Viscosity Data: Helipath/HB-DV-II+Pro by Brookfield, Speed: 50rpm. ** Flow test: 30cc Syringe, 2.2mm (0.09") orifice at 0.17MPa (25psi).

COMPRESSION FORCE

INITIAL RELAXING IN 1 MINUTE LATER

GAP FILLER TYPE

unit : N/6.4cm² (psi)

C/R	GR-ae				GR14A				GR25A			
	50G-ae	100G-ae	200G-ae	400G-ae	00-50GY	00-100GY	00-200GY	00-400GY	00-50GY	00-100GY	00-200GY	00-400GY
10%	47→21 (10.6→4.8)	41→16 (9.3→3.6)	31→9 (7.0→2.0)	17→5 (3.9→1.1)	74→13 (16.8→2.9)	61→11 (13.8→2.5)	44→9 (10.0→2.0)	22→6 (5.0→1.4)	108→27 (24.5→6.1)	92→25 (20.8→5.7)	77→22 (17.4→5.0)	55→18 (12.5→4.1)
20%	205→77 (46.4→17.4)	148→50 (33.5→11.3)	84→25 (19.0→5.7)	33→13 (7.5→2.9)	195→66 (44.2→15.0)	135→41 (30.6→9.3)	98→28 (22.2→6.3)	45→17 (10.2→3.9)	252→83 (57.1→18.8)	203→58 (46.0→13.1)	156→55 (35.3→12.5)	113→39 (25.6→8.8)
30%	363→153 (82.2→34.7)	263→110 (59.6→24.9)	158→64 (35.8→14.5)	53→30 (12.0→6.8)	337→161 (76.4→36.5)	244→103 (55.3→23.3)	166→75 (37.6→17.0)	88→39 (19.9→8.8)	413→191 (93.6→43.3)	342→148 (77.5→33.5)	263→120 (59.6→27.2)	178→84 (40.3→19.0)
40%	516→226 (116.9→51.2)	386→179 (87.5→40.6)	243→104 (55.1→23.6)	85→55 (19.3→12.5)	512→261 (116.0→59.1)	405→181 (91.8→41.0)	286→155 (64.8→35.1)	162→82 (36.7→18.6)	583→287 (132.1→65.0)	505→234 (114.4→53.0)	408→186 (92.4→42.1)	258→144 (58.5→32.6)
50%	656→306 (148.6→69.3)	513→249 (116.2→56.4)	353→185 (80.0→41.9)	138→60 (31.3→13.6)	673→301 (152.5→68.2)	568→296 (128.7→67.1)	467→247 (105.8→56.0)	281→147 (63.7→33.3)	740→351 (167.7→79.5)	675→337 (152.9→76.4)	569→285 (128.9→64.6)	400→213 (90.6→48.3)

C/R	GR45A				GR80A				XR-m			GR130A		
	00-50GY	00-100GY	00-200GY	00-400GY	0H-30GY	0H-50GY	00-100GY	00-200GY	50X-m	100X-m	200X-m	00-50GY	00-100GY	00-200GY
10%	70→22 (15.9→5.0)	72→37 (16.3→8.4)	52→17 (11.8→3.9)	31→10 (7.0→2.3)	68→50 (15.4→11.3)	106→78 (24.0→17.7)	82→28 (18.6→6.3)	60→22 (13.6→5.0)	94→45 (21.3→10.2)	98→58 (22.2→13.1)	112→78 (25.4→17.7)	224→35 (50.8→7.9)	299→22 (67.7→5.0)	140→16 (31.7→3.6)
20%	243→154 (55.1→34.9)	291→164 (65.9→37.2)	160→64 (36.3→14.5)	95→34 (21.5→7.7)	193→182 (43.7→41.2)	312→228 (70.7→51.7)	229→134 (51.9→30.4)	183→100 (41.5→22.7)	308→188 (69.8→42.6)	329→202 (74.5→45.8)	445→358 (100.8→81.1)	460→89 (104.2→20.2)	529→58 (119.9→13.1)	364→54 (82.5→12.2)
30%	470→298 (106.5→67.5)	551→328 (124.8→74.3)	300→114 (68.0→25.8)	169→58 (38.3→13.1)	356→339 (80.7→76.8)	568→445 (128.7→100.8)	468→267 (106.0→60.5)	379→229 (85.9→51.9)	572→397 (129.6→89.9)	653→503 (147.9→114.0)	1032→764 (233.8→173.1)	908→248 (205.7→56.2)	1026→149 (232.5→33.8)	701→105 (158.8→23.8)
40%	703→445 (159.3→100.8)	859→512 (194.6→116.0)	441→163 (99.9→36.9)	239→82 (54.1→18.6)	510→497 (115.5→112.6)	832→621 (188.5→140.7)	698→414 (158.1→93.8)	608→347 (137.8→78.6)	836→589 (189.4→133.4)	1051→758 (238.1→171.7)	1621→1155 (367.3→261.7)	1559→564 (353.2→127.8)	1386→221 (314.0→50.1)	1068→139 (242.0→31.5)
50%	913→649 (206.9→147.0)	1135→667 (257.1→151.1)	582→219 (131.9→49.6)	315→117 (71.4→26.5)	678→660 (153.6→149.5)	1145→861 (259.4→195.1)	930→532 (210.7→120.5)	794→449 (179.9→101.7)	1099→875 (249.0→198.2)	1471→882 (333.3→199.8)	—	2030→845 (459.9→191.4)	2095→350 (474.6→79.3)	1406→182 (318.5→41.2)

EXTREMELY COMPRESSIBLE GAP FILLER TYPE

C/R	PG25A				PG45A				GR-Pm			PG80A			
	00-100GY	00-200GY	00-400GY	00-150GY	00-200GY	00-250GY	150G-Pm	200G-Pm	250G-Pm	00-50BL	00-100BL	00-200BL	00-50BL	00-100BL	00-200BL
10%	94→13 (21.3→2.9)	42→7 (9.5→1.6)	24→5 (5.4→1.1)	70→1 (15.9→0.2)	58→1 (13.1→0.2)	36→<1 (8.2→<0.2)	53→9 (12.0→2.0)	52→7 (11.8→1.6)	50→5 (11.3→1.1)	50→10 (11.3→2.3)	42→9 (9.5→2.0)	29→7 (6.6→1.6)	—	—	—
20%	153→34 (34.7→7.7)	78→20 (17.7→4.5)	47→11 (10.6→2.5)	115→1 (26.1→0.2)	88→2 (19.9→0.5)	54→1 (12.2→0.2)	153→42 (34.7→9.5)	144→31 (32.6→7.0)	123→23 (27.9→5.2)	191→42 (43.3→9.5)	130→34 (29.5→7.7)	72→15 (16.3→3.4)	—	—	—
30%	241→65 (54.6→14.7)	127→36 (28.8→8.2)	84→23 (19.0→5.2)	175→3 (39.6→0.7)	112→2 (25.4→0.5)	75→1 (17.0→0.2)	265→72 (60.0→16.3)	231→58 (52.3→13.1)	207→39 (46.9→8.8)	337→95 (76.4→21.5)	215→60 (48.7→13.6)	111→22 (25.1→5.0)	—	—	—
40%	368→125 (83.4→28.3)	202→63 (45.8→14.3)	137→45 (31.0→10.2)	228→4 (51.7→0.9)	156→3 (35.3→0.7)	94→1 (21.3→0.2)	375→103 (85.0→23.3)	314→82 (71.1→18.6)	289→54 (65.5→12.2)	474→157 (107.4→35.6)	292→88 (66.2→19.9)	140→28 (31.7→6.3)	—	—	—
50%	533→212 (120.8→48.0)	306→118 (69.3→26.7)	211→88 (47.8→19.9)	307→6 (69.6→1.4)	207→4 (46.9→0.9)	132→2 (29.9→0.5)	492→144 (111.5→32.6)	408→118 (92.4→26.7)	371→76 (84.1→17.2)	605→258 (137.1→58.5)	374→131 (84.7→29.7)	166→41 (37.6→9.3)	—	—	—

FORM IN PLACE GAP FILLER TYPE

unit : N/6.4cm²(psi)

1.0mm Gap	SPG-20B	SPG-30B	SPG-50A
0.9mm / 0.035in	10 (2.3)	24 (5.4)	34 (7.7)
0.8mm / 0.031in	12 (2.7)	28 (6.3)	38 (8.6)
0.7mm / 0.028in	14 (3.2)	34 (7.7)	45 (10.2)
0.6mm / 0.024in	17 (3.9)	41 (9.3)	54 (12.2)
0.5mm / 0.020in	21 (4.8)	53 (12.0)	69 (15.6)
Relaxing (0.5mm)	3 (0.7)	7 (1.6)	16 (3.6)

0.5mm Gap	SPG-20B	SPG-30B	SPG-50A
0.45mm / 0.018in	20 (4.5)	53 (12.0)	80 (18.1)
0.40mm / 0.016in	22 (5.0)	62 (14.0)	89 (20.2)
0.35mm / 0.014in	24 (5.4)	67 (15.2)	100 (22.7)
0.30mm / 0.012in	29 (6.6)	82 (12.6)	119 (27.0)
0.25mm / 0.010in	33 (7.5)	96 (21.8)	141 (31.9)
Relaxing (0.25mm)	3 (0.7)	10 (2.3)	6 (1.4)

a) C/R : Compression Ratio

b) Relaxing : Relief of the forth in 1 minute later.

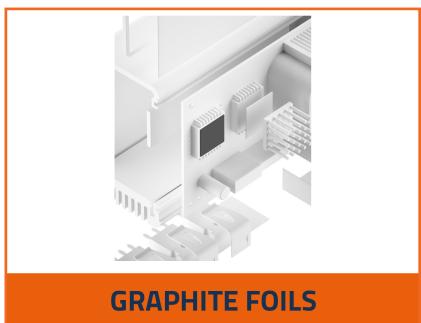
c) Measured by ASTM D575-91(2012) for reference. → See P.38



KØLEPROFILER



VORES PRODUKTSORTIMENT INKLUDERER:



GRAPHITE FOILS



TIM OVERSIGT



TERMISK LEDENDE MATERIALE



VÆSKE KØLEDE PROFILER



PROFILMECC



KØLEPROFILER

VI FØRER PRODUKTER INDENFOR KATEGORIERNE:



AUTOMATIK



HVAC & BYGNINGS-AUTOMATIK



ELVARME



NEWTRONIC

Ove Jensens Alle 35 F
DK-8700 Horsens
Denmark
www.newtronic.eu
www.newtronic.dk
+45 7669 7090

