



Overview:

GFL series of Gap Filler Liquid are ceramic filled, solvent free 2 components silicone elastomer. Room temperature curing making it suitable for wet in wet production.

Benefits:

- Room temperature curing
- Liquid assembly
- Better surface conformability than pads
- Major cost saving
- Longer shelf life
- Low outgassing

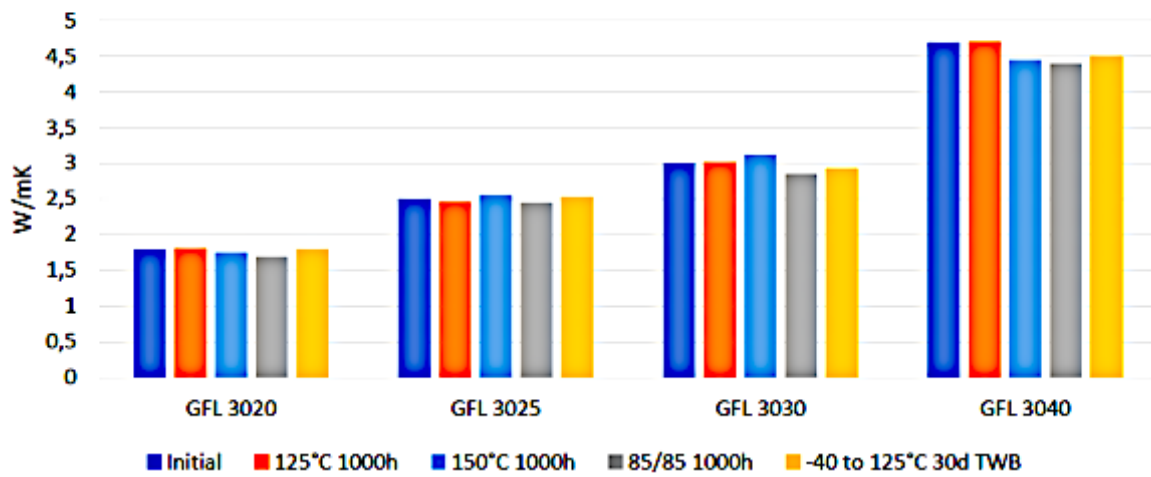
Applications:

- All applications with high fabrication tolerance
- Encapsulation
- Electric vehicles
- High energy rechargeable batteries

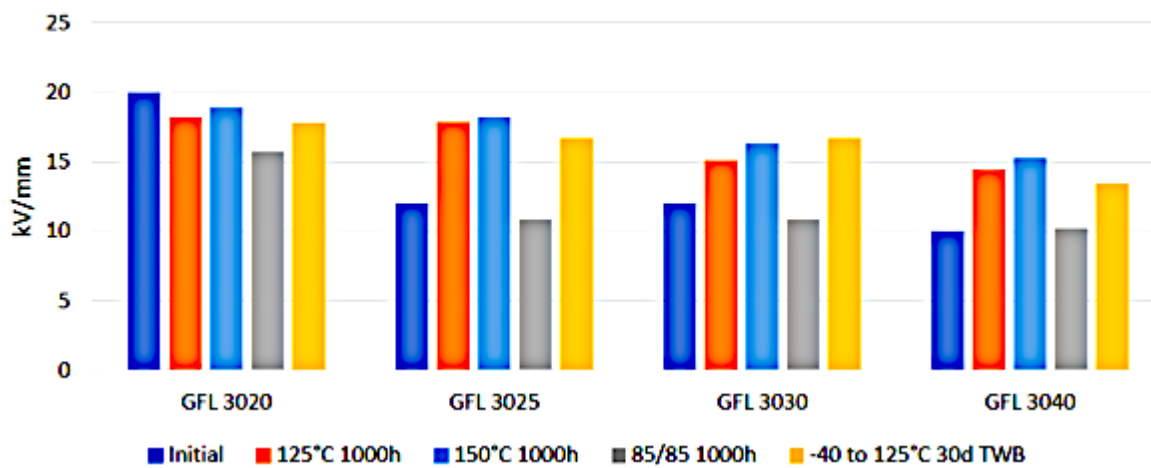
Properties	Unit	GFL3020	GFL3025	GFL3030	GFL3040	Test Method
Colour	-	Yellow	Orange	Green	Lilac	Visual
Base Material	-	Silicone	Silicone	Silicone	Silicone	-
Mixing Ratio	-	1 : 1	1 : 1	1 : 1	1 : 1	-
Pot Life (Minutes)	-	60	60	60	60	Visual
Thermal Properties						
Thermal resistance R_{th}	K/W	0.7	0.5	0.41	0.29	Kerafol
Thermal conductivity λ	W/m-K	1.8	2.5	3.0	4.3	ASTM D 5470
Electrical Properties						
Breakdown voltage $U_{d;ac}$	kV	10	8	6	5	ASTM D 149
Dielectric breakdown $E_{d;ac}$	kV/mm	20	16	12	10	ASTM D 149
Mechanical Properties						
Measured thickness (+/-10%)	mm	0.500	0.500	0.500	0.500	ASTM E 252
Hardness	Shore 00	45 - 60	65 - 85	65 - 85	65 - 85	ASTM D 2240
Physical Properties						
Operating temperature	°C	-40 to +200	-40 to +200	-60 to +250	-60 to +200	Kerafol
Density	g/cm ³	2.30	2.83	2.94	3.05	Kerafol
Viscosity (Shear rate 4 ⁻¹ /25°C)	Pas	45 - 70	30 - 60	50 - 80	55 - 85	Kerafol
Total Mass Loss (TML)	Ma.-%	0.19	<0.09	<0.06	<0.09	ASTM E 595
Flame rating	UL 94	VO	VO	VO	VO	U.L.
Bond line	mm	0.2 - 0.5	0.2 - 0.5	0.2 - 0.5	0.2 - 0.5	Kerafol

Kerafol GFL long-time behaviour test

Long-time thermal conductivity test



Long-time breakdown voltage test



Long-time Hardness test

