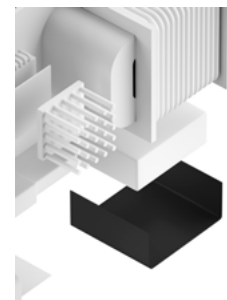


Formex are flame retardant grades of polypropylene, primarily used for electrical insulation properties. These materials meet the insulation requirements for most applications due to their high dielectric strength, low moisture absorption and UL94V-0 flame class rating. Due to its superior mechanical properties it can be folded even repeatedly without cracking or splitting to fabricate 3-dimensional shapes



Release 04 / 2024

**PROPERTIES**

- UL flame retardant
- High dielectric strength
- High mechanic stability
- Extremely good long-term and chemical stability
- Non-hygroscopic (water absorption 0.06 %)
- Can be folded repeatedly without cracking or splitting to 3 dimensional parts

**DELIVERY SHAPES**

- Rolls GK-5BK, GK-10, GK-17, GK-30
- Sheets
- Non tacky
- 1 side tacky
- 2 side tacky
- Die cut parts
- Curved and bended
- With imprints

**APPLICATION EXAMPLES**

- Electrical insulation in:
- Power supply units
  - PCB boards to housings
  - Transformers
  - Contact protection

Technical Data Sheet

Property	Unit	GK-5BK	GK-10	GK-17	GK-30	GK-40	GK-62
<b>Material</b>		Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Colour		Black	Black, Natural	Black, Natural	Black, Natural	Black, Natural	Black, Natural
Thickness	mm	0.127 ±0.025	0.25 +0.08 / -0.04	0.43 +0.08 / -0.03	0.76 ±0.05	1.02 ±0.05	1.57 ±0.10
Density	g/cm <sup>3</sup>	1.035	1.035	1.035	1.035	1.035	1.035
Tensile Yield Machine Direction	PSI	3.700	4.400	4.400	4.000	4.000	4.000
Tensile Yield Transverse	PSI	3.000	3.200	3.200	3.200	3.700	3.700
UL Flammability	UL 94	VTM -0	VTM -0	V0	V0	V0	V0
RoHS Conformity	2002/95/EC	Yes	Yes	Yes	Yes	Yes	Yes
<b>Thermal</b>							
Heat Deflection Temperature @ 66 PSI	°C	121	121	121	121	121	121
Operating Temperature (Electrical)	°C	115	115	115	115	115	115
Operating Temperature (Mechanical)	°C	115	115	115	115	115	115
<b>Electrical</b>							
Breakdown Voltage	kV	11.000	16.264	20.292	29.610	33.380	41.558
Dielectric Strength	kV/mm	86.614	64.015	47.007	38.858	32.835	26.378
Volume Resistivity @ 25°C	Ohm/cm	3.97 x 10 <sup>15</sup>	3.97 x 10 <sup>15</sup>	3.97 x 10 <sup>15</sup>	3.97 x 10 <sup>15</sup>	3.97 x 10 <sup>15</sup>	3.97 x 10 <sup>15</sup>
Dielectric Constant		1.9	1.9	1.9	1.9	1.9	1.9
Dissipation Factor		0.0023	0.0023	0.0023	0.0023	0.0023	0.0023

All data without warranty and subject to change. Please contact us for further data and information

Thicknesses: 0.127 mm / 0.25 mm / 0.43 mm / 0.76 mm / 1.02 mm / 1.57 mm

All technical data and information are without warranty and believed to be reliable and accurate corresponding to the latest state of the art. Since the products are not provided to conform with mutually agreed specifications, and their use and processing are unknown we cannot guarantee results, freedom from patent infringement, or their suitability for any application. Product testing by the applicant is recommended. We reserve the right of change.