



ITW Electronic Components/Products (Shanghai) Co., Ltd.
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 China, 201108
 Tel: 86-21-54426006 Fax: 86-21-54426007*268
 Web Site: www.itwformex.cn

FORMEX® GK PRODUCT DATA

FLAME RETARDANT POLYPROPYLENE SHEET

	TEST METHOD	FORMEX GK-5BK	FORMEX GK-10	FORMEX GK-17	FORMEX GK-30	FORMEX GK-40	FORMEX GK-62
Color		Black	Natural & Black	Natural & Black	Natural & Black	Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION							
Thickness							
inch		0.005 (+0.001/-0.001)	0.010 (+0.003/-0.0015)	0.017 (+0.003/-0.001)	0.030 (+0.002/-0.002)	0.040 (+0.002/-0.002)	0.062 (+0.004/-0.004)
millimeter		0.127 (+0.025/-0.025)	0.25 (+0.08/-0.04)	0.43 (+0.08/-0.03)	0.76 (+0.05/-0.05)	1.02 (+0.05/-0.05)	1.57 (+0.10/-0.10)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS							
Flammability	UL 94	VTM-0	VTM-0	V-0	V-0	V-0	V-0
Relative Temperature Index	UL 746B						
Electrical		115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F
Mechanical Without Impact		115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F	115°C/ 239°F
High Current Arc Ignition - PLC	UL 746A	0	0	0	0	0	0
High Voltage Arc Tracking - PLC	UL 746A	0	0	0	0	0	0
Hot Wire Ignition - PLC	UL 746A	4	4	4	4	4	4
Comparative Tracking Index - PLC	ASTM D-3638	0	0	0	0	0	0
TYPICAL MECHANICAL PROPERTIES VALUES							
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2						
Machine Direction		3700	4400	4400	4000	4000	4000
Transverse Direction		3000	3200	3200	3200	3700	3700
TYPICAL PHYSICAL PROPERTIES VALUES							
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.035	1.035	1.035	1.035	1.035	1.035
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	29	29	29	29	29	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.06%	0.06%	0.06%	0.06%	0.06%	0.06%
Heat Deflection Temperature under load	ASTM D-648 0.45MPa / ISO 75-1,-2,Method B	121°C/ 250°F	121°C/ 250°F	121°C/ 250°F	121°C/ 250°F	121°C/ 250°F	121°C/ 250°F
Surface Energy - dynes/cm (as produced)	ASTM D-2578	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50
TYPICAL ELECTRICAL PROPERTIES VALUES							
Comparative Tracking Index - volts	IEC 60112	600	600	600	600	600	600
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	11,000	16,264	20,292	29,610	33,380	41,558
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	2,200	1,626	1,194	987	834	670
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	3.97 x 10 ¹⁵	3.97 x 10 ¹⁵	3.97 x 10 ¹⁵	3.97 x 10 ¹⁵	3.97 x 10 ¹⁵	3.97 x 10 ¹⁵
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	1.90	1.90	1.90	1.90	1.90	1.90
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0023	0.0023	0.0023	0.0023	0.0023	0.0023
PACKAGING INFORMATION							
Standard Configuration		Roll	Roll	Roll	Roll & Sheet	Sheet	Sheet
Core ID - inches (millimeters)		6 (152)	6 (152)	6 (152)	6 (152)	-	-
Roll OD - inches (millimeters) (approximate)		11(289)	18 (457)	18 (457)	18 (457)	-	-
Roll Width - inches (millimeters)		24 (610)	24 (610)	24 (610)	24 (610)	-	-
Roll Weight - lbs (kgs) (approximate)		57 (26)	198 (90)	178 (81)	192 (87)	-	-
Length/Roll - feet (meters)		1000 (304.8)	2000 (609.6)	1000 (304.8)	600 (182.9)	-	-
Area/Roll - square feet (square meters)		2000 (185.8)	4000 (371.6)	2000 (185.8)	1200 (111.5)	-	-
Sheet Sizes - inches (millimeters)		-	-	-	24 x 48 (610 x 1219)	24 x 48 (610 x 1219)	24 x 48 (610 x 1219)

Notice: The above data is believed to be accurate and reliable. ITW assumes no responsibility for end-use application, and no performance warranty is expressed or implied.



E121855 E256266

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For a complete listing of Formex products, contact your Formex sales representative.
 Version: Feb.22nd,2018

FORMEX[®] EP PRODUCT DATA

FLAME RETARDANT POLYPROPYLENE SHEET

TEST METHOD	FORMEX™ EP-10	FORMEX™ EP-17	FORMEX™ EP-20	FORMEX™ EP-30	FORMEX™ EP-40	FORMEX™ EP-62
Color	Natural & Black	Natural & Black	Natural & Black	Natural & Black	Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION						
Thickness						
inch	0.010 (+0.003/-0.0015)	0.017 (+0.003/-0.001)	0.020 (+0.002/-0.002)	0.030 (+0.002/-0.002)	0.040 (+0.003/-0.003)	0.062 (+0.004/-0.004)
millimeter	0.25 (+0.08/-0.04)	0.43 (+0.08/-0.03)	0.50 (+0.05/-0.05)	0.76 (+0.05/-0.05)	1.0 (+0.08/-0.08)	1.57 (+0.10/-0.10)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS						
Flammability	UL 94	VTM-0	V-0	V-0	V-0	V-0
Relative Temperature Index	UL 746B					
Electrical		90°C/ 194°F	90°C/ 194°F	90°C/ 194°F	90°C/ 194°F	90°C/ 194°F
Mechanical Without Impact		90°C/ 194°F	90°C/ 194°F	90°C/ 194°F	90°C/ 194°F	90°C/ 194°F
High Current Arc Ignition - PLC	UL 746A	3	2	2	2	1
High Voltage Arc Tracking - PLC	UL 746A	0	0	0	0	0
Hot Wire Ignition - PLC	UL 746A	4	4	4	4	3
Comparative Tracking Index - PLC	ASTM D-3638	0	0	0	0	0
TYPICAL MECHANICAL PROPERTIES VALUES						
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2					
Machine Direction		3700	3700	3700	3700	3700
Transverse Direction		3200	3200	3400	3400	3400
TYPICAL PHYSICAL PROPERTIES VALUES						
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	0.972	0.972	0.972	0.972	0.972
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	28	28	28	28	28
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.06%	0.06%	0.06%	0.06%	0.06%
Heat Deflection Temperature at 66 psi	ASTM D-648 0.45MPa / ISO 75-1,-2, Method B	106°C/ 223°F	106°C/ 223°F	106°C/ 223°F	106°C/ 223°F	106°C/ 223°F
Surface Energy - dynes/cm (as produced)	ASTM D-2578	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50
TYPICAL ELECTRICAL PROPERTIES VALUES						
Comparative Tracking Index - volts	IEC 60112	600	600	600	600	600
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	16,512	20,570	22,440	25,310	29,350
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	1,651	1,210	1,122	844	734
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	3 x 10 ¹⁵	3 x 10 ¹⁵	3 x 10 ¹⁵	3 x 10 ¹⁵	3 x 10 ¹⁵
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	2.30	2.30	2.30	2.30	2.30
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0017	0.0017	0.0017	0.0017	0.0017
PACKAGING INFORMATION						
Standard Configuration		Roll	Roll	Roll	Roll	Sheet
Core ID - inches (millimeters)		6 (152)	6 (152)	6 (152)	6 (152)	-
Roll OD - inches (millimeters) (approximate)		18 (457)	18 (457)	18 (457)	18 (457)	-
Roll Width - inches (millimeters)		24 (610)	24 (610)	24 (610)	24 (610)	-
Roll Weight - lbs (kgs) (approximate)		192 (87)	172 (78)	200 (91)	180 (82)	-
Length/Roll - feet (meters)		2000 (609.6)	1000 (304.8)	1000 (304.8)	600 (182.9)	-
Area/Roll - square feet (square meters)		4000 (371.6)	2000 (185.8)	2000 (185.8)	1200 (111.5)	-
Sheet Sizes - inches (millimeters)		-	-	-	-	24 x 48 (610 x 1219)

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FORMEX[®] GL PRODUCT DATA

FLAME RETARDANT POLYPROPYLENE SHEET

ITW Electronic Components/Products (Shanghai) Co.,Ltd.
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	TEST METHOD	FORMEX [™] GL-10	FORMEX [™] GL-17
Color		Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION			
Thickness			
inch		0.010 (+0.003/-0.0015)	0.017 (+0.003/-0.001)
millimeter		0.25 (+0.08/-0.04)	0.43 (+0.08/-0.03)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS			
Flammability	UL 94	VTM-0	V-0
Relative Temperature Index	UL 746B		
Electrical		125°C/ 257°F	125°C/ 257°F
Mechanical Without Impact		115°C/ 239°F	115°C/ 239°F
High Current Arc Ignition - PLC	UL 746A	2	2
High Voltage Arc Tracking - PLC	UL 746A	0	0
Hot Wire Ignition - PLC	UL 746A	0	0
Comparative Tracking Index - PLC	ASTM D-3638	0	0
TYPICAL MECHANICAL PROPERTIES VALUES			
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2		
Machine Direction		5000	4300
Transverse Direction		2900	3100
TYPICAL PHYSICAL PROPERTIES VALUES			
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	0.972	0.972
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	29	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.06%	0.06%
Heat Deflection Temperature at 66 psi	ASTM D-648 0.45MPa / ISO 75-1,-2,Method B	122°C/ 252°F	122°C/ 252°F
Surface Energy - dynes/cm (as produced)	ASTM D-2578	≥ 50	≥ 50
TYPICAL ELECTRICAL PROPERTIES VALUES			
Comparative Tracking Index - volts	IEC 60112	600	600
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	18,799	20,837
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	1,880	1,226
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	1 x 10 ¹⁶	1 x 10 ¹⁶
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	1.80	1.80
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0017	0.0017
PACKAGING INFORMATION			
Standard Configuration		Roll	Roll
Core ID - inches (millimeters)		6 (152)	6 (152)
Roll OD - inches (millimeters) (approximate)		18 (457)	18 (457)
Roll Width - inches (millimeters)		24 (610)	24 (610)
Roll Weight - lbs (kgs) (approximate)		192 (87)	172 (78)
Length/Roll - feet (meters)		2000 (609.6)	1000 (304.8)
Area/Roll - square feet (square meters)		4000 (371.6)	2000 (185.8)

Notice: The above data is believed to be accurate and reliable. ITW assumes no responsibility for end-use application, and no performance warranty is expressed or implied.



FORMEX[®] GS PRODUCT DATA

STATIC DISSIPATIVE FLAME RETARDANT POLYPROPYLENE SHEET

ITW Electronic Components/Products (Shanghai) Co., Ltd.
 Building 5, #789 Shenfu Road, Xinzhuang Industrial Park, Shanghai,
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 Tel: 86-21-54426006 Fax: 86-21-54426007*268
 Web Site: www.itwformex.cn

	TEST METHOD	FORMEX [™] GS-10	FORMEX [™] GS-17	FORMEX [™] GS-30
Color		Natural*	Natural*	Natural*
MANUFACTURING SPECIFICATION				
Thickness				
inch		0.010 (+0.003/-0.0015)	0.017 (+0.003/-0.001)	0.030 (+0.002/-0.002)
millimeter		0.25 (+0.08/-0.04)	0.43 (+0.08/-0.03)	0.76 (+0.05/-0.05)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS				
Flammability	UL 94	VTM-0	V-0	V-0
Relative Temperature Index	UL 746B			
Electrical		115°C/ 239°F	115°C/ 239°F	115°C/ 239°F
Mechanical Without Impact		115°C/ 239°F	115°C/ 239°F	115°C/ 239°F
High Current Arc Ignition - PLC	UL 746A	0	0	0
High Voltage Arc Tracking - PLC	UL 746A	0	0	0
Hot Wire Ignition - PLC	UL 746A	4	4	4
Comparative Tracking Index - PLC	ASTM D-3638	0	0	0
TYPICAL MECHANICAL PROPERTIES VALUES				
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2			
Machine Direction		4400	4400	4000
Transverse Direction		3200	3200	3200
TYPICAL PHYSICAL PROPERTIES VALUES				
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.035	1.035	1.035
Oxygen Index, %	ASTM D-2863 / ISO 4589-1,-2	29	29	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.06%	0.06%	0.06%
Heat Deflection Temperature at 66 psi	ASTM D-648 0.45MPa / ISO 75-1,-2, Method B	121°C/ 250°F	121°C/ 250°F	121°C/ 250°F
TYPICAL ELECTRICAL PROPERTIES VALUES				
Comparative Tracking Index - volts	IEC 60112	600	600	600
Surface Resistivity - ohms/square	ASTM D-257	10 ⁹ -10 ¹¹	10 ⁹ -10 ¹¹	10 ⁹ -10 ¹¹
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	16,830	19,610	26,480
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	1,683	1,154	883
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	8 x 10 ¹⁵	8 x 10 ¹⁵	8 x 10 ¹⁵
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	2.30	2.30	2.30
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0019	0.0019	0.0019
PACKAGING INFORMATION				
Standard Configuration		Roll	Roll	Roll
Core ID - inches (millimeters)		6 (152)	6 (152)	6 (152)
Roll OD - inches (millimeters) (approximate)		18 (457)	18 (457)	18 (457)
Roll Width - inches (millimeters)		24 (610)	24 (610)	24 (610)
Roll Weight - lbs (kgs) (approximate)		225 (102.1)	178 (81)	192 (87)
Length/Roll - feet (meters)		2000 (609.6)	1000 (304.8)	600 (182.9)
Area/Roll - square feet (square meters)		4000 (371.6)	2000 (185.8)	1200 (111.5)

* Product is line-marked on treated side with carbonless black ink.

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FORMEX[®] CHI PRODUCT DATA

FLAME RETARDANT POLYCARBONATE SHEET

ITW Electronic Components/Products (Shanghai) Co.,Ltd.
 Building 5, #789 Shenfu Road, Xinzhuang Industrial Park, Shanghai,
 China, 201108
 Tel: 86-21-54426006 Fax: 86-21-54426007*268
 Web Site: www.itwformex.cn

TEST METHOD	FORMEX [™] CHI-8	FORMEX [™] CHI-10
Color	Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION		
Thickness		
inch	0.008 (+0.001/-0.001)	0.010 (+0.0015/-0.0015)
millimeter	0.20 (+0.03/-0.03)	0.25 (+0.04/-0.04)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS		
Flammability	UL 94	VTM-0
Relative Temperature Index	UL 746B	VTM-0
Electrical		80°C/ 176°F
Mechanical Without Impact		80°C/ 176°F
High Current Arc Ignition - PLC	UL 746A	1
High Voltage Arc Tracking - PLC	UL 746A	1
Hot Wire Ignition - PLC	UL 746A	4
Comparative Tracking Index - PLC	ASTM D-3638	3
Furnished As	Three layers of sheets	Three layers of sheets
Voltage Meets Mandrel Test, VAC	IEC 60950-1 / IEC61558-1	7000
TYPICAL MECHANICAL PROPERTIES VALUES		
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2	
Machine Direction	7200	7200
Transverse Direction	6900	6900
TYPICAL PHYSICAL PROPERTIES VALUES		
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.21
Oxygen Index - %	ASTM D-2863 / ISO 4589--1,-2	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.2%
Heat Deflection Temperature under load	ASTM D-648 0.45MPa / ISO 75-1,-2,Method B	140°C/ 284°F
TYPICAL ELECTRICAL PROPERTIES VALUES		
Comparative Tracking Index - volts	IEC 60112	175
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	16,029
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	2,004
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	1.2 x 10 ¹⁶
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	2.22
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0072
PACKAGING INFORMATION		
Standard Configuration	Ro11	Ro11
Core ID - inches (millimeters)	6 (152)	6 (152)
Roll OD - inches (millimeters) (approximate)	17 (432)	17 (432)
Roll Width - inches (millimeters)	24 (610)	24 (610)
Roll Weight - lbs (kgs) (approximate)	202 (92)	220 (100)
Length/Roll - feet (meters)	2000 (609.6)	1750 (533.4)
Area/Roll - square feet (square meters)	4000 (371.6)	3500 (325.2)

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For a complete listing of Formex products, please contact your Formex sales representative.
 Version: Feb.22nd,2018

FORMEX® N1J PRODUCT DATA

FLAME RETARDANT POLYCARBONATE SHEET

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 Building 5, Shenfu Road, Xinzhuang Industrial Park, Shanghai,
 China, 201108
 Tel: 86-21-54426006 Fax: 86-21-54426007*268
 Web Site: www.itwformex.cn

TEST METHOD	FORMEX™ N1J-8	FORMEX™ N1J-10
Color	Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION		
Thickness		
inch	0.008 (+0.001/-0.001)	0.010 (+0.0015/-0.0015)
millimeter	0.20 (+0.03/-0.03)	0.25 (+0.04/-0.04)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS		
Flammability	UL 94	VTM-0
Relative Temperature Index	UL 746B	VTM-0
Electrical		105°C/ 221°F
Mechanical Without Impact		105°C/ 221°F
High Current Arc Ignition - PLC	UL 746A	0
High Voltage Arc Tracking - PLC	UL 746A	3
Hot Wire Ignition - PLC	UL 746A	0
Comparative Tracking Index - PLC	ASTM D-3638	3
Furnished As	Three layers of sheets	Three layers of sheets
Volume Meets Mandrel Test, VAC	IEC 60950-1 / IEC61558-1	7000
TYPICAL MECHANICAL PROPERTIES VALUES		
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2	
Machine Direction	8200	7800
Transverse Direction	7650	7380
TYPICAL PHYSICAL PROPERTIES VALUES		
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.25
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	28
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.2%
Heat Deflection Temperature under load	ASTM D-648 0.45MPa / ISO 75-1,-2, Method B	139°C/ 282°F
TYPICAL ELECTRICAL PROPERTIES VALUES		
Comparative Tracking Index - volts	IEC 60112	175
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	16,164
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	2,021
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	1.2 x 10 ¹⁶
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	1.90
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0081
PACKAGING INFORMATION		
Standard Configuration	Roll	Roll
Core ID - inches (millimeters)	6 (152)	6 (152)
Roll OD - inches (millimeters) (approximate)	17 (432)	17 (432)
Roll Width - inches (millimeters)	24 (610)	24 (610)
Roll Weight - lbs (kgs) (approximate)	206 (93)	225 (102)
Length/Roll - feet (meters)	2000 (609.6)	1750 (533.4)
Area/Roll - square feet (square meters)	4000 (371.6)	3500 (325.2)

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For a complete listing of Formex products, please contact your Formex sales representative.
 Version: Feb.22nd, 2018

FORMEX[®] N3 PRODUCT DATA

FLAME RETARDANT POLYCARBONATE SHEET

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 China, 201108
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 Web Site: www.itwformex.cn

	TEST METHOD	FORMEX [™] N3-8	FORMEX [™] N3-10
Color		Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION			
Thickness			
inch		0.008 (+0.001/-0.001)	0.010 (+0.0015/-0.0015)
millimeter		0.20 (+0.03/-0.03)	0.25 (+0.04/-0.04)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS			
Flammability	UL 94	VTM-0	VTM-0
Relative Temperature Index	UL 746B		
Electrical		130°C/ 266°F	130°C/ 266°F
Mechanical Without Impact		130°C/ 266°F	130°C/ 266°F
High Current Arc Ignition - PLC	UL 746A	1	1
High Voltage Arc Tracking - PLC	UL 746A	1	1
Hot Wire Ignition - PLC	UL 746A	4	4
Comparative Tracking Index - PLC	ASTM D-3638	3	3
Furnished As		Three layers of sheets	Three layers of sheets
Voltage Meets Mandrel Test, VAC	IEC 60950-1 / IEC 61558-1	7000	7000
TYPICAL MECHANICAL PROPERTIES VALUES			
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2		
Machine Direction		7200	7200
Transverse Direction		6900	6900
TYPICAL PHYSICAL PROPERTIES VALUES			
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.21	1.21
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	29	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.2%	0.24%
Heat Deflection Temperature under load	ASTM D-648 0.45MPa / ISO 75-1,-2, Method B	140°C/ 284°F	140°C/ 284°F
TYPICAL ELECTRICAL PROPERTIES VALUES			
Comparative Tracking Index - volts	IEC 60112	175	175
Dielectric Breakdown - volts	ASTM D-149 / IEC 60243-1	16,029	17,587
Dielectric Strength - volts/mil	ASTM D-149 / IEC 60243-1	2,004	1,759
Volume Resistivity - ohm-cm	ASTM D-257 / IEC 62631-3-1	1.2 x 10 ¹⁶	1.2 x 10 ¹⁶
Dielectric Constant	ASTM D-150 / IEC 60250, 1MHz	2.22	2.22
Dissipation Factor	ASTM D-150 / IEC 60250, 1MHz	0.0072	0.0072
PACKAGING INFORMATION			
Standard Configuration		Roll	Roll
Core ID - inches (millimeters)		6 (152)	6 (152)
Roll OD - inches (millimeters) (approximate)		17 (432)	17 (432)
Roll Width - inches (millimeters)		24 (610)	24 (610)
Roll Weight - lbs (kgs) (approximate)		202 (92)	220 (100)
Length/Roll - feet (meters)		2000 (609.6)	1750 (533.4)
Area/Roll - square feet (square meters)		4000 (371.6)	3500 (325.2)

Notice: The above data is believed to be accurate and reliable. ITW assumes no responsibility for end-use application, and no performance warranty is expressed or implied.



FORMEX[®] CND PRODUCT DATA

FLAME RETARDANT POLYCARBONATE SHEET

ITW Electronic Components/Products (Shanghai) Co., Ltd.
 Building 5, #789 Shenfu Road, Xinzhuang Industrial Park, Shanghai,
 China, 201108
 Tel: 86-21-54426006 Fax: 86-21-54426007*268
 Web Site: www.itwformex.cn

	TEST METHOD	FORMEX [™] CND-8	FORMEX [™] CND-10
Color		Natural & Black	Natural & Black
MANUFACTURING SPECIFICATION			
Thickness			
inch		0.008 (+0.001/-0.001)	0.010 (+0.0015/-0.0015)
millimeter		0.20 (+0.03/-0.03)	0.25 (+0.04/-0.04)
UL FLAMMABILITY RATING / PERFORMANCE LEVELS			
Flammability	UL 94	VTM-0	VTM-0
Relative Temperature Index	UL 746B		
Electrical		80°C/ 176°F	80°C/ 176°F
Mechanical Without Impact		80°C/ 176°F	80°C/ 176°F
High Current Arc Ignition - PLC	UL 746A	1	1
High Voltage Arc Tracking - PLC	UL 746A	1	1
Hot Wire Ignition - PLC	UL 746A	4	4
Comparative Tracking Index - PLC	ASTM D-3638	3	3
Furnished As		Three layers of sheets	Three layers of sheets
Voltage Meets Mandrel Test, VAC	IEC 60950-1 / IEC61558-1	7000	7000
TYPICAL MECHANICAL PROPERTIES VALUES			
Tensile Yield - psi	ASTM D-882 / ISO 527-1,-2		
Machine Direction		7200	7200
Transverse Direction		6900	6900
TYPICAL PHYSICAL PROPERTIES VALUES			
Density - gm/cc	ASTM D-792 / ISO 1183-1, Method A	1.21	1.21
Oxygen Index - %	ASTM D-2863 / ISO 4589-1,-2	29	29
Water Absorption - % Change in weight	ASTM D-570 / ISO 62, Method 4	0.2%	0.2%
Heat Deflection Temperature under load	ASTM D-648 0.45MPa / ISO 75-1,-2,Method B	140°C/ 284°F	140°C/ 284°F
TYPICAL ELECTRICAL PROPERTIES VALUES			
Comparative Tracking Index - volts	IEC 60112	175	175
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