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PC PC/ABS



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台湾化學纖維股份有限公司
FORMOSA CHEMICALS & FIBRE CORPORATION

TAIRILITE[®]
PC

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耐候級 Weatherability Grade

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高透光級 High Transparency Grade

3

紅外線穿透 IR Transmittance

3

擴散級 Diffusion Grade

一般型 General

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阻燃型 Flame Retardant

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透明阻燃級

Transparent Flame Retardant Grade

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低溫耐沖級 Low Temp. Resistance Grade

透明型 Transparency

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半透明型 Translucency

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阻燃型 Flame Retardant

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耐燃級 Self Extinguishing Grade

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一般級 General Purpose Grade

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耐燃級 Self Extinguishing Grade (FR-PCABS)

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耐候級
Weatherability
Grade

高透光級
High Transparency
Grade

紅外線穿透
IR Transmittance

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC1115	AC2916	AC2955
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	11	35	20
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m²)	ASTM D-256 (ISO 180)	23°C , 3.2mm, Notched	80 (785)	60 (590)	70 (685)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C , 4mm, Notched	75	55	65
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.20	1.20	1.20
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C , 50mm/min	710 (70)	650 (65)	690 (68)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	1100 (108)	1200 (118)	1125 (110)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	22000 (2155)	24000 (2350)	22500 (2205)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	122	123	122
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	128	126	128
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	128	126	128
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.5~0.7	0.5~0.7	0.5~0.7
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	> 88	> 90	-
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	< 0.5	< 0.5	-
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	0.8mm V2 RTI 80°C All Color	1.0mm V2 RTI 80°C All Color	1.0mm V2 RTI 80°C All Color
特性 Speciality				透明、中流動性、 高潔淨 PC、低魚眼 Transparency, Mid flow, High clean PC, Low gel.	高透光性、高流動性 High Transparency, High flow.	紅外線穿透、 中高流動性 IR transmittance, Mid-high flow
用途 Application				光學應用、PC 膜、 PC 板應用 Optical applications, High transparency, PC film, PC sheet.	導光條、車用晝行燈 LED 聚光鏡頭 Light guide bar, Daytime running lights for car lamp, LED condenser lens.	應用於資訊傳遞，如遙控 器、手機 PDA、無線鍵盤 Applications in Information transfer, such as remote control, mobile phone PDA and wireless keyboard ect



擴散級 Diffusion Grade

一般型
General阻燃型
Flame
Retardant

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC2820	AC2854	AC2856	AC3830
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	27	12	27	12
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m²)	ASTM D-256 (ISO 180)	23°C , 3.2mm, Notched	6 (60)	75 (735)	6 (60)	75 (735)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C , 4mm, Notched	6	70	6	70
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.20	1.20	1.20	1.20
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C , 50mm/ min	600 (60)	710 (70)	600 (60)	710 (70)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	1020 (100)	1100 (108)	1020 (100)	1100 (108)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	22800 (2230)	22000 (2155)	22800 (2230)	22000 (2155)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	122	122	122	122
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	125	128	125	128
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	125	128	125	128
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.5~0.7	0.5~0.7	0.5~0.7	0.5~0.7
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	99~20	80~45	99~60	90~60
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	91~88	91~88	91~88	91~40
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	1.0mm V2 RTI 80°C All Color	0.75mm V2 RTI 120~130°C f1 WT, RD, BK	0.75mm V2 RTI 120~130°C f1 WT, RD, BK	1.0mm V0 3.0mm 5VA RTI 130°C , f1 All Color
特性 Speciality				光擴散特性、高流動性、抗 UV Light diffusion, High flow, UV resistance	光擴散特性、中流動性、抗 UV Light diffusion, Mid flow, UV resistance	光擴散特性、高流動性、抗 UV Light diffusion, High flow, UV resistance	光擴散特性、中流動性、抗 UV、無鹵 Light diffusion, Mid flow, UV resistance, Halogen free
用途 Application				汽車照明應用，如日行燈、位置燈、內飾燈 Automotive lighting applications, such as DRL, position lights, interior lights	擴散板、擴散燈管 (LED 燈管外殼) Diffusion board, Diffusion lamp (LED tube shell)	擴散射出燈泡、擴散射吹球泡 Diffusion injection lampshade, Diffusion injection-blow bulb	擴散板、擴散燈管、擴散射出燈泡、擴散射吹球泡 Diffusion board, Diffusion lamp, Diffusion injection lampshade, Diffusion injection-blow bulb

PC

PC/ABS

PC/ASA

耐候級
Weatherability Grade高透光級
High Transparency Grade紅外線穿透
IR Transmittance擴散級
Diffusion Grade透明阻燃級
Transparent Flame
Retardant Grade低溫耐沖級
Low Temp.
Resistance Grade

透明阻燃級 Transparent Flame Retardant Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3832	AC3843	AC3853
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	5	12	12
Izod 衝擊強度 Izod Impact Strength	kg-cm/cm (J/m²)	ASTM D-256 (ISO 180)	23°C, 3.2mm, Notched	75	80	80
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C, 4mm, Notched	70	75	75
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.20	1.20	1.20
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C, 50mm/min	710 (70)	710 (70)	710 (70)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C, 2mm/min	1100 (108)	1100 (108)	1100 (108)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C, 2mm/min	22000 (2156)	22000 (2155)	22000 (2155)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	122	122	122
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	128	128	128
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	128	128	128
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.5~0.7	0.5~0.7	0.5~0.7
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	> 87	> 87	> 87
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	< 1.0	< 1.0	< 1.0
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	1.0mm V0 3.0mm 5VA RTI 130°C, f1 All Color	3.0mm V0 RTI 130°C f1 All Color	2.5mm V0 RTI 130°C f1 All Color
特性 Speciality				透明、阻燃、低流動性、抗 UV、無鹵 Transparency, Flame retardant, Low flow, UV resistance, Halogen free.w	透明、阻燃、中低流動性、抗 UV、無鹵 Transparency, Flame retardant, Mid-low flow, UV resistance, Halogen free.	透明、阻燃、中低流動性、抗 UV、無鹵 Transparency, Flame retardant, Mid-low flow, UV resistance, Halogen free.
用途 Application				透明阻燃板材、射出件 Transparent flame-retardant sheet and injection parts.	透明阻燃射出件 Transparent flame-retardant injection parts.	透明阻燃射出件 Transparent flame-retardant injection parts.



透明阻燃級 Transparent Flame Retardant Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3854	AC3873
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	12	5
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m²)	ASTM D-256 (ISO 180)	23°C, 3.2mm, Notched	80	75
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C, 4mm, Notched	75	70
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.20	1.20
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C, 50mm/ min	710 (70)	710 (70)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C, 2mm/min	1100 (108)	1100 (108)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C, 2mm/min	22000 (2155)	22000 (2155)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	122	122
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	128	128
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	128	128
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.5~0.7	0.5~0.7
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	> 87	> 87
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	< 1.0	< 1.0
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	2.5mm V0 RTI 130°C f1 All Color	1.5mm V0 RTI 130°C f1 All Color
特性 Speciality				透明、阻燃、中低流動性、 抗 UV、無鹵 Transparency, Flame retardant, Mid-low flow, UV resistance, Halogen free.	透明、阻燃、低流動性、 抗 UV、無鹵 Transparency, Flame retardant, Low flow, UV resistance, Halogen free.
用途 Application				透明阻燃射出件 Transparent flame-retardant injection parts.	透明阻燃板材、射出件 Transparent flame-retardant sheet and injection parts.



低溫耐沖級
Low Temp. Resistance Grade

透明型
Transparency

半透明型
Translucency

阻燃型
Flame
Retardant

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC9140	AC9144	AC3839
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	13	13	12
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m²)	ASTM D-256 (ISO 180)	23°C , 3.2mm, Notched	65(23°C) 50(-30°C) 25(-40°C)	75(23°C) 60(-30°C) 55(-40°C)	75(23°C) 50(-30°C)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C , 4mm, Notched	60(23°C) 45(-30°C) 25(-40°C)	70(23°C) 55(-30°C) 50(-40°C)	70(23°C) 45(-30°C)
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.18	1.18	1.20
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C , 50mm/ min	600 (60)	600 (60)	680 (67)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	1000 (98)	1000 (98)	1000 (98)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	21000 (2060)	21000 (2060)	21000 (2060)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	120	120	120
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	120	120	125
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	120	120	125
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.6~0.8	0.6~0.8	0.4~0.8
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	> 87	-	-
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	< 1.0	-	-
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	2.0mm V2 RTI 80°C All Color	2.0mm V2 RTI 80°C All Color	1.0mm V0 3.0mm 5VA RTI 130°C , f1 All Color
特性 Speciality				透明性、中流動性、 低溫耐沖性、抗 UV Transparency, Mid flow, Low temperature, impact property, UV resistance,	半透明性、中流動性、 低溫耐沖性、抗 UV Translucency, Mid flow, Low temperature, impact property, UV resistance,	中流動性、阻燃、 低溫耐沖性、抗 UV Mid flow, Flame retardant, Low temperature impact property, UV resistance
用途 Application				手機、平板、筆電、3C 產 品外殼、運動器材、護具 Mobile phone, tablet, laptop, 3C products case, sports equipment, protective gear.	手機、平板、筆電、3C 產 品外殼、運動器材、護具 Mobile phone, tablet, laptop, 3C products case, sports equipment, protective gear.	充電樁外殼、電池 外殼、路由器外殼 Charging shell, battery shell, router shell

PC

PC/ABS

PC/ASA

耐候級
Weatherability Grade

高透光級
High Transparency Grade

紅外線穿透
IR Transmittance

擴散級
Diffusion Grade

透明阻燃級
Transparent Flame
Retardant Grade

低溫耐沖級
Low Temp.
Resistance Grade



耐燃級 Self Extinguishing Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3600	AC3630
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	11	25
Izod 衝擊強度 Izod Impact Strength	kg-cm/cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	75 (735)	65 (635)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23 °C 4mm	65	55
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C /23°C	1.19	1.19
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23°C	660 (65)	670 (66)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	1,050 (103)	1,100 (106)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23°C	22,000 (2,100)	24,000 (2,350)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-120	R-121
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75/A)	Unannealed 18.6 kg/cm²(1.8MPa) (3.2mm)	123	109 (0.45MPa)
衛氏軟化點 Vicat Softening Point	°C	ASTM D-1525 (ISO 306)	VICAT(10N °C)	147	116
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.5-0.7	0.5-0.7
燃燒性 Flammability	-	UL-94	FILE NO. E162823	1.0mm V-0 1.2mm V-0 1.5mm V-0 2.0mm V-0, 5VB 3.0mm V-0 All Color	0.8mm V-0 1.5mm V-0, 5VB 3.0mm V-0, 5VB All Color f2
符號 Symbol	-	1043	-	>PC<	>PC<
特性 Speciality				無鹵、耐燃、高耐熱性、 非透明性 Halogen free, Flame retardant, High heat resistance, Non-transparency	無鹵、耐燃、高流動性、非透明性、UL 耐候認證 Halogen free, Flame retardant, High flow, Non-transparency, UL weather resistance certification
用途 Application				適配器、變壓器、充電器、電池、路由器 等產品外殼 Adapters, transformers, chargers, batteries, routers casings	家用電器、3C 電子產品、戶外用品外殼、 電動自行車電池外殼、儲能設備外殼 Household appliances, 3C electronic products, outdoor equipment shell, electric bike battery case, Energy storage device



耐燃級 Self Extinguishing Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3710	AC3900
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	28	26
Izod 衝擊強度 Izod Impact Strength	kg-cm/cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	70 (685)	60 (585)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23 °C 4mm	40	45
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C /23°C	1.20	1.28
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23°C	640 (63)	610 (60)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	1,060 (104)	1,060 (104)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23°C	24,000 (2,350)	24,000 (2,350)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-122	R-121
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75/A)	Unannealed 18.6 kg/cm²(1.8MPa) (3.2mm)	111 (0.45MPa)	124
衛氏軟化點 Vicat Softening Point	°C	ASTM D-1525 (ISO 306)	VICAT(10N °C)	120	146
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.5-0.7	0.5-0.7
燃燒性 Flammability	-	UL-94	FILE NO. E162823	0.45mm V-1 0.6mm V-0 0.8mm V-0 1.5mm V-0, 5VB 3.0mm V-0, 5VB All Color	1.5mm V-0 3.0mm V-0 NC
符號 Symbol	-	1043	-	>PC<	>PC<
特性 Speciality				無鹵、耐燃、高流動級、非透明性 Halogen free, Flame retardant, High flow, Non-transparency	無鹵、耐燃、白色、非透明性、高光反射性 Halogen free, Flame retardant, White color, Non-transparency, High gloss reflection
用途 Application				家用電器、3C 電子產品內部配件、薄壁電子電器外殼，如筆記型電腦電池外殼、儲能設備內部件 Household appliances, 3C electronic product casings, Thin-walled electrical equipment housing such as laptop battery casings, internal components of energy storage devices	家用照明、電子觸控面板模組內部配件，如 LED 燈帽、燈座、面板白膠框 Home lighting, Electronics touch panel module internal accessories such as LED lamp cap, lamp holder, panel white frame

PC

PC/ABS

PC/ASA

耐燃級
Self Extinguishing Grade

FR-PC+G.F

一般級
General Purpose Grade耐燃級
Self Extinguishing Grade (FR-PCABS)

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC2120
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	6
Izod 衝擊強度 Izod Impact Strength	kg-cm/cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	15 (145)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23 °C 4mm	15
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C /23°C	1.34
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23°C	1,090 (107)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	1,680 (160)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23°C	59,100 (5,792)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-121
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75/A)	Unannealed 18.6 kg/cm²(1.8MPa) (3.2mm)	135
衛氏軟化點 Vicat Softening Point	°C	ASTM D-1525 (ISO 306)	VICAT(10N °C)	153
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.2-0.5
燃燒性 Flammability	-	UL-94	FILE NO. E162823	1.5mm V-2 3.0mm V-1 All Color
符號 Symbol	-	1043	-	>PC<
特性 Speciality				無鹵、耐燃、高剛性、尺寸安定性、耐化學性 Halogen free, Flame retardant, High Stiffness, Dimensional stability, Chemical resistance
用途 Application				家用電器、辦公室設備內部配件，如印表機墨水匣支架、運動器材 Home appliances, Office equipment interior accessories such as printer ink cartridge holders, Sports equipment



項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3510
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	300°C × 1.2kg	12
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m²)	ASTM D-256 (ISO 180)	23°C , 3.2mm, Notched	<10
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23°C , 4mm, Notched	<10
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C	1.30
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527-1,2)	23 °C , 50mm/ min	810 (80)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	1400 (138)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C , 2mm/min	41500 (4065)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039-2)	23°C	122
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648	Unannealed 18.6 kg/cm², 3.2mm, 120°C /h	132
		ISO 75/A	Unannealed, 1.8MPa, 4mm, 120°C /h	132
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 294-4)	-	0.2~0.5
透明度 Transmissin	%	ASTM D-1003 (ISO 13468-1)	3.2mm	-
霧度 Haze	%	ASTM D-1003 (ISO 14782)	3.2mm	-
燃燒性 Flammability	-	UL94 UL746B UL746C	FILE NO. E162823	1.5mm V0 RTI 80°C All Color
特性 Speciality				高剛性、阻燃、中低流動性、抗 UV、無鹵 High flexural, Flame retardant, Mid-low flow, UV resistance, Halogen free.
用途 Application				3C 產品外殼、網路通訊外殼、居家電器外殼 3C products case, network communication shell, Appliance shell



一般級 General Purpose Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC2000	AC2300	AC2500
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	240°C × 5kg	7	9	8
			260°C × 5kg	17	21	19
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	65 (635)	55 (540)	60 (585)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23 °C 4mm	55	40	50
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C /23°C	1.14	1.10	1.12
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23°C	600 (59)	510 (50)	550 (54)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	960 (94)	880 (86)	950 (93)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23°C	24000 (2350)	24000 (2350)	25000 (2450)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-116	R-110	R-114
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75/A)	Unannealed 18.6 kg/cm² (1.8MPa)(6.4mm)	112 (104)	96 (88)	106 (98)
衛氏軟化點 Vicat Softening Point	°C	ASTM D-1525 (ISO 306)	VICAT(10N °C)	136	117	130
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.4-0.6	0.4-0.6	0.4-0.6
燃燒性 Flammability	-	UL-94	FILE NO. E162823	1.5-1.65mm HB All Color	1.5-1.65mm HB All Color	1.5mm HB 3.0mm HB All Color
符號 Symbol	-	1043	-	>PC+ABS<	>ABS+PC<	>PC+ABS<
特性 Speciality				高耐衝擊性 High impact	電鍍級 Metal plating	耐熱級 Heat resistant
用途 Application				汽車配件、家用電器、 3C 電子產品及家庭用品 外殼如尾燈、相機、防 護頭盔、平板電腦 Auto parts, household appliances, 3C electronic products and houseware shells such as tail lights, cameras, helmets, tablet PC	汽車配件、家用電器、 3C 電子產品及家庭用品 外殼如輪圈蓋、把手、 行動硬碟 Auto parts, household appliances, 3C electronic products and household goods casings such as wheel covers, handles, Portable storage device	汽車配件、家用電器、 3C 電子產品、儀錶板、 水箱護罩、衛浴配件、 電器控制旋鈕 Auto parts, household appliances, 3C electronic products, instrument panel, grill, bathroom accessories, electrical control knobs



耐燃級 Self Extinguishing Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC3100	AC3250	AC3300
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	240°C × 5kg 260°C × 2.16kg	25 17	25 12	42 30
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	65 (635)	6.5 (64)	29 (280)
Charpy 衝擊強度 Charpy Impact Strength	kJ/m²	ISO 179	23 °C 4mm	44	5	13
比重 Specific Gravity	-	ASTM D-792 (ISO 1183)	23°C /23°C	1.18	1.3	1.18
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23°C	650 (60)	640 (63)	610 (59)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	1000 (94)	1110 (103)	1030 (92)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23°C	25000 (2438)	41600 (4000)	26000 (2550)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-118	R-115	R-118
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75/A)	Unannealed 18.6 kg/cm² (1.8MPa)(6.4mm)	90 (82)	89 (84)	88 (85)
衛氏軟化點 Vicat Softening Point	°C	ASTM D-1525 (ISO 306)	VICAT(10N °C)	107	103	100
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.4-0.6	0.3-0.5	0.4-0.6
燃燒性 Flammability	-	UL-94	FILE NO. E162823	1.0mm V-0 1.2mm V-0 1.5mm V-0 2.3mm V-0, 5VB 3.0mm V-0, 5VA All Color	1.2mm V-0 2.0mm V-0, 5VB 3.0mm V-0, 5VA All Color	1.2mm V-0 1.6mm V-0 ,5VB 1.8mm V-0 ,5VB All Color
符號 Symbol	-	1043	-	>PC+ABS-FR(40)<	>PC+ABS-MD15-FR(40)<	>ABS+PC-FR(40)<
特性 Speciality				耐燃、無鹵 Flame retardant, Halogen free	耐燃、無鹵 Flame retardant, Halogen free	耐燃、無鹵 Flame retardant, Halogen free
用途 Application				家用電器、3C 電子產品、筆記型電腦、網通產品、電腦周邊產品 Household appliances, 3C electronic products, notebook computers, Netcom products, computer peripheral products	家用電器、3C 電子產品及網通產品外殼、汽車零件儀表板 Notebook casings, 3C products, Electrical equipment, Dashboard	辦公室設備、3C 電子產品、多功能事務機 OA equipment, 3C electronic products, Multi-functional peripheral





一般級
General Purpose Grade

耐燃級
Self Extinguishing Grade

項目 Property	單位 Unit	試驗方法 Test Method	試驗條件 Test Condition	AC8050	AC9300
熔融指數 Melt Flow Index	g/10 min	ASTM D-1238 (ISO 1133)	240°C × 5kg	8	12
Izod 衝擊強度 Izod Impact Strength	kg-cm/ cm (J/m)	ASTM D-256 (ISO 180)	23 °C 3.2mm	60 (585)	70 (685)
比重 Specific Gravity	—	ASTM D-792 (ISO 1183)	23°C /23°C	1.12	1.18
抗張強度 Tensile Strength	kg/cm² (MPa)	ASTM D-638 (ISO 527)	23 °C	540 (52)	600 (57)
彎曲強度 Flexural Strength	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	850 (83)	1,000 (97)
彎曲模數 Flexural Modulus	kg/cm² (MPa)	ASTM D-790 (ISO 178)	23 °C	22000 (2150)	24000 (2350)
洛氏硬度 Rockwell Hardness	R-scale	ASTM D-785 (ISO 2039/2)	23°C	R-110	R-118
熱變形溫度 Heat Deflection Temperature	°C	ASTM D-648 (ISO 75)	Unannealed 18.6 kg/cm² (1.8MPa) (6.4mm)	104	100
收縮率 Molding Shrinkage	%	ASTM D-955 (ISO 2577)	3.2mm	0.5-0.7	0.5-0.7
燃燒性 Flammability	-	UL-94	FILE NO. E162823	1.5mm HB All Color	3.0mm V0 All Color
符號 Symbol	-	1043	-	>PC+ASA<	>PC+ASA<
特性 Speciality				耐候性 Weather resistance 耐熱級 Heat resistant 射出級 Injection	耐候性 射出級 & 押出級 Extrusion & Injection
用途 Application				戶外產品、戶外接線盒、 汽車配件 Outdoor Products, junction box, Auto parts	板材產品、電纜線槽、 網通設備外殼 Extrusion Products, Cable tray





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