



Technical Data Sheet 規格書

Grade 規格	CGR002
Resin Type 材質種類	Minimum 50% PCR Polycarbonate with 20% Glass Fiber Reinforced
Color 顏色	Black
Revision Date 修改日期	2024/11/1 Rev. 1

檢驗項目 Property	測試標準 Standard	測試條件 Test Condition	實際測值 Typical Value	範圍 Range	單位 Unit
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Physical 物理性質					
比重 Specific Gravity	ASTM D792	23°C	1.035	1.03-1.07	g/cm ³
收縮率 Molding Shrinkage	ASTM D955	23°C	-	0.4-0.6	%
熔融指數 Melt Flow Rate	ASTM D1238	220°C, 10kg	25.0	18.0-33.0	g/10min

Mechanical 機械性質					
衝擊強度 IZOD Impact Strength, Notched	ASTM D256	3.2mm, 23°C	20.0	14.0-24.0	kg-cm/cm
彎曲強度 Flexural Strength	ASTM D790	3.2mm, 1.3mm/min Span 50mm	700	650-780	kg/cm ²
		6.4mm, 2.8mm/min Span 100mm	560	500-600	
彎曲模數 Flexural Modulus	ASTM D790	3.2mm, 1.3mm/min Span 50mm	25,500	24,000-29,000	kg/cm ²
		6.4mm, 2.8mm/min Span 100mm	19,000	18,000-22,000	
斷裂伸長率 Elongation at break	ASTM D638	3.2mm 50mm/min	30	25-65	%
拉伸強度 Tensile Strength	ASTM D638	3.2mm 50mm/min	380	360-440	kg/cm ²

Thermal 熱性質					
熱變形溫度 H.D.T.	ASTM D648	1.8MPa, 6.4mm unannealed	86	80-90	°C
		1.8MPa, 6.4mm annealed (80°C/2hrs)	92	85-95	
		1.8MPa, 3.2mm unannealed	81	80-90	
		1.8MPa, 3.2mm annealed (80°C/2hrs)	89	85-95	

Flammability 耐燃性					
阻燃等級 Flame Rating	UL94	1.5mm	HB	-	-

Note 注意事項
1. Typical values are only for material selction purpose, and variation within normal tolerances are for various lots. 2. Values given should not be used for part or tool design. Users should confirm results by their own tests.

Processing Guide 加工條件參考

Grade 規格	PCR ABS AR130, for all recycle ratio, all colors
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檢驗項目 Property	參考範圍 Range	單位 Unit
預乾燥溫度 Pre-Dry Temperature	80-90	°C
預乾燥時間 Pre-Dry Time	2-4	hrs
加工 (熔融) 溫度 Processing (Melt) Temperature	200-250	°C
料管後段溫度 Rear Temperature	200-220	°C
料管中段溫度 Middle Temperature	210-240	°C
料管前段溫度 Front Temperature	220-250	°C
模溫 Mold Temperature	30-70	°C
射出速度 Injection Speed	40-90	%

Note 注意事項
1. Please avoid using "Cleaning Naphtha 去漬油/去脂水" for cleaning work to prevent the unexpected issues. 2. Cylinder temperatures are valid for a standard 3-zone barrel. 3. Temperature set-up for different barrel types may change according to configuration. 4. Drying conditions are for dry air dryers only. 5. Drying times and drying temperatures may differ depending on valid dryer type.