



ABS 系列複合材料物性表

compound datasheets

| 項目 Property | | 試驗法 ASTM Method | 單位 Units | ABS FR, GF10 | ABS FR, GF15 | ABS FR, GF20 | ABS, CF20 | ABS, CF30 | ABS FR, UV | |
|--|--|------------------------------|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|---------|
| 一般性質 | 比重 Specific Gravity | D792 | - | 1.32 | 1.34 | 1.36 | 1.13 | 1.18 | 1.22 | |
| | 成型收縮率 Mold Shrinkage | 6.35mm截面 | D955 | % | - | - | - | - | - | |
| | | 3.18mm截面 | | | 0.25~0.35 | 0.2~0.3 | 0.1~0.3 | 0.05~0.2 | 0.05~0.2 | 0.6~0.8 |
| 吸水率(24 hours) Water absorption, 24 hrs @ 23°C | D570 | % | 0.2 | 0.2 | 0.15 | - | - | 0.3 | | |
| 機械性質 | 衝擊強度 Impact Strength | 3.18mm截面(缺口) Notched Izod | D256 | J/m | 59 | 53 | 53 | 53 | 267 | |
| | | 3.18mm截面(無缺口) Unnotched Izod | | | 240 | 240 | 267 | 267 | 294 | 1602 |
| | 伸張強度 Tensile Strength | D638 | MPa | 62 | 66 | 72 | 107 | 121 | 34 | |
| | 延伸率 Tensile Elongation | D638 | % | 3~4 | 2~3 | 2 | 1~1.5 | 1~1.5 | 8~12 | |
| | 伸張模數 Tensile Modulus | D638 | MPa | 4826 | 5861 | 6550 | 13790 | 18616 | 2206 | |
| | 彈性強度 Flexural Strength | D790 | MPa | 93 | 97 | 103 | 152 | 176 | 57 | |
| | 彈性模數 Flexural Modulus | D790 | MPa | 4482 | 5171 | 5861 | 11722 | 15858 | 2206 | |
| 洛氏硬度 Rockwell Hardness | D785 | - | - | - | 103 R | - | - | - | | |
| 熱性質 | 熱變形溫度 DTUL | at 264 psi (1.82 MPa) | D648 | °C | 102 | 102 | 104 | - | - | 88 |
| | | at 66 psi (0.455 MPa) | | | 104 | 107 | 110 | - | - | 91 |
| | 連續使用溫度 Continuous Use Temp. | UL-746B | °C | - | - | - | - | - | - | |
| | 線性熱膨脹係數 Coefficient of Linear Thermal Expansion | D 696 | 10 ⁻⁵ /°C | - | - | - | - | - | - | |
| 防火等級 Flammability thickness | - | - | - | V-0 @ 1.5 mm | V-0 @ 1.5 mm | V-0 @ 1.5 mm | *HB @ 1.5 mm | *HB @ 1.5 mm | V-0 @ 1.5 mm | |
| 電氣性質 | 體積固有電阻 Volume Resistivity | D257 | ohm-cm | >1e16 | >1e15 | >1e15 | <1e3 | <1e2 | >1e14 | |
| | 表面電阻 Surface Resistivity | D257 | ohm/SQ | - | - | - | - | - | - | |
| | 靜電消散(MIL-PRF-81705C) Static Decay | FTMS-4046.1 | sec | - | - | - | - | - | - | |

* Tested by factory.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein. Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.