



HDPE 系列複合材料物性表

compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	HDPE	HDPE, Anti-static	HDPE, ICP	HDPE, CB	HDPE, CF
一般性質	比重 Specific Gravity	D792	-	0.95	0.97	0.98	1.06	1
	成型收縮率 Mold Shrinkage	6.35mm截面	%	-	-	-	-	-
		3.18mm截面		1.7~2.9	2~4	3~5	2~3	0.2~0.4
吸水率(24 hours) Water absorption, 24 hrs @ 23°C		D570	%	-	-	-	-	-
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	J/m	53	No Break	53	32	53
		3.18mm截面(無缺口) Unnotched Izod		No Break	No Break	No Break	No Break	160
	伸張強度 Tensile Strength	D638	MPa	20	17	22	24	31
	延伸率 Tensile Elongation	D638	%	>10	>10	>10	>10	6~10
	伸張模數 Tensile Modulus	D638	MPa	1241	690	965	1034	5516
	彈性強度 Flexural Strength	D790	MPa	21	18	22	31	41
	彈性模數 Flexural Modulus	D790	MPa	827	690	827	1172	3103
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	
熱性質	熱變形溫度 DTUL	at 264 psi (1.82 MPa)	°C	-	-	-	-	-
		at 66 psi (0.455 MPa)		-	-	-	-	-
	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	-	-	-	*HB @ 1.5 mm	-	-	-	-
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	-	1e9~ 9.9e10	1e3~1e5	<1e3	<1e3
	表面電阻 Surface Resistivity	D257	ohm/SQ	-	1e10~ 9.9e11	1e6~1e8	<1e6	<1e6
	靜電消散(MIL-PRF-81705C) Static Decay	FTMS-4046.1	sec	-	<2	-	<2	<2

* 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.