



# POM 系列複合材料物性表

## compound datasheets

項目 Property		試驗法 ASTM Method	單位 Units	POM, AR10, PTFE15	POM, AR15, PTFE15	POM, MoS <sub>2</sub> 5	POM, Si <sub>2</sub>	POM, PTFE5	POM, PTFE10	POM, PTFE20	POM, PTFE18, Si <sub>2</sub>	
一般性質	比重 Specific Gravity	D792	-	1.49	1.46	1.46	1.4	1.42	1.45	1.51	1.48	
	成型收縮率 Mold Shrinkage	6.35mm截面	D955	%	-	2.4	-	-	-	-	3	-
		3.18mm截面			1~2	1.6	1.9	2.2	2	2	1.9	2.2
吸水率(24 hours) Water absorption, 24 hrs @ 23°C	D570	%	-	0.4	-	-	-	-	-	0.15	-	
機械性質	衝擊強度 Impact Strength	3.18mm截面(缺口) Notched Izod	D256	J/m	75	75	64	85	69	53	53	53
		3.18mm截面(無缺口) Unnotched Izod			534	481	1068	No Break	747	747	427	534
	伸張強度 Tensile Strength	D638	MPa	59	62	61	54	55	52	41	38	
	延伸率 Tensile Elongation	D638	%	5~8	5~7	7~12	>10	>10	>10	>10	>10	
	伸張模數 Tensile Modulus	D638	MPa	3448	3445	2896	2758	2620	2413	2205	2068	
	彈性強度 Flexural Strength	D790	MPa	79	76	90	72	76	76	62	59	
	彈性模數 Flexural Modulus	D790	MPa	3103	3101	2620	2620	2344	2206	2067	1931	
洛氏硬度 Rockwell Hardness	D785	-	-	-	-	-	-	-	-	110 R	-	
熱性質	熱變形溫度 DTUL	at 264 psi ( 1.82 MPa)	D648	°C	135	138	121	110	110	110	102	104
		at 66 psi (0.455 MPa)			-	160	-	-	-	-	149	-
	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 <sup>-5</sup> /°C	-	-	-	-	-	-	-	-	
防火等級 Flammability thickness	-	-	-	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	*HB @ 1.5 mm	
電氣性質	體積固有電阻 Volume Resistivity	D257	ohm-cm	1e14~1e16	10e14	-	-	-	-	10e14	-	
	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.