

TYPICAL PROPERTIES DATA SHEET

Hony Engineering Plastics Limited

HONY® ABS Properties Data Sheet

① Raw material description

Standard Grade:	Extrusion grade	Appearance color:	Black
Application:	Processing material,rod, sheet, board, tube. Widely used in automobile, electronics, office and communication equipments.		
Charactor:	With superior impact strength and surface hardness in uniform temperature, superior dimenison stability, certin chemical resistance and superior dielectrical property.		

② Raw material technical datasheet

Property item	Test conditions	Testing method	Testing data	Unit
I. Physical property				
Gravity	23°C	ASTM D792	1.03~1.07	g/cm ³
Shrinkage	---	ASTM D955	0.3~0.8	%
Water absorption	---	ASTM D570	0.2~0.45	%
Flammability class	---	UL94	HB	Class
II. Mechanical property				
Tensile strength	---	ASTM D638	50	MPa
Elongation at break	---	ASTM D638	20	%
Flexural Strength	---	ASTM D790	70	MPa
Flexural Modulus of elasticity	---	ASTM D790	1.76~2.94	GPa
Compression strength	---	ASTM D790	70	MPa
Hardness— Rockwell	---	ASTM D785	65~109	R (Scale)
Hardness—Shore D	---	ASTM D2240	83	D
IZOD Impact Strength	23°C	ASTM D256	150	KJ/m ²
IZOD Impact Strength (notched)	23°C	ASTM D256	27	KJ/m ²
Friction Coefficient	---	ASTM D1894	0.5	---
III. Thermal Properties				
Heat deflection temperature HDT/A	1.82MPa	ASTM D648	87	°C
Max.working temperature(short term)	---	UL746B	100	°C
Max.working temperature(long term)	---	UL746B	75	°C
Vicat Softening Temperature	50N,120°C/h	ASTM D1525	100	°C
Brittle temperature	---	ASTM D746	>-40	°C
Thermal conductivity	23°C	ASTM C177	0.16~0.29	W/(m*K)
Coefficient of linear thermal expansion	---	ASTM D696	8~11	10 ⁻⁵ K ⁻¹
IV. Electrical properties				

Dielectric Constant	1 MHz	ASTM D150	2.4~3.8	10 ⁶ Hz
Dielectric loss angle tangent	1 MHz	ASTM D150	0.009	10 ⁶ Hz
Dielectric strength	---	ASTM D149	13~20	kV/mm
Volume resistivity	---	ASTM D257	10 ¹⁶	Ω * cm
Surface resistivity	---	ASTM D257	10 ¹⁴	Ω
Arc-resistance	---	ASTM D495	66~82	sec

NOTE: 1 g/cm³ = 1,000 kg/m³, 1 Mpa = 1 N/mm², 1kV/mm = 1 MV/m

Statement:

NOTE: The information contained herein are typical values intended for reference and comparison purposes only. They should NOT be used as a basis for design specifications or quality control. Hony will not provide any legally binding guarantee of certain properties, or any suitability.



