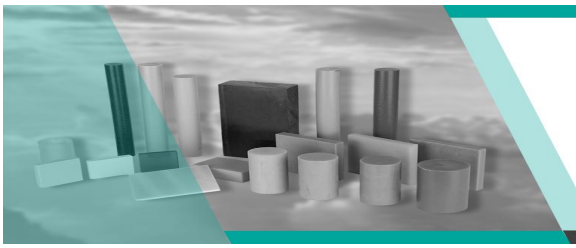

TYPICAL PROPERTIES
DATA SHEET
Hony Engineering Plastics Limited

HONY® ABS Properties Data Sheet (flame retardant)

①Raw material description			
Standard Grade:	Flame retardant grade	**Appearance color:**	**Natural or 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.		

②Raw material technical datasheet				
Property item	**Test conditions**	**Testing method**	**Testing data**	**Unit**
I.Physical property				
Gravity	23°C	ASTM D792	1.17	g/cm^3
Shrinkage	---	ASTM D955	0.3	%
Water absorption	---	ASTM D570	0.2	%
Flammability class	---	UL94	V-0	Class
Ⅱ.Mechanical property				
Tensile strength	---	ASTM D638	40	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	80	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	85	℃
Max.working temperature(short term)	---	UL746B	100	℃
Max.working temperature(long term)	---	UL746B	80	℃
Vicat Softening Temperature	50N,120℃/h	ASTM D1525	100	℃
Brittle temperature	---	ASTM D746	＞-40	℃
Thermal conductivity	23°C	ASTM C177	0.15	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	3.2	10^6Hz
Dielectric loss angle tangent	1 MHz	ASTM D150	0.017	10^6Hz
Dielectric strength	---	ASTM D149	23	kV/mm
Volume resistivity	---	ASTM D257	10^{15}	Ω * cm
Surface resistivity	---	ASTM D257	10^{14}	Ω
Arc-resistance	---	ASTM D495	66~82	sec

NOTE: 1 g/cm^3 = 1,000 kg/m^3, 1 Mpa = 1 N/mm^2, 1kV/mm = 1 MV/m