

# Forming Grade Plastics

	ABS	ABS FR	CON- DUCTIVE ABS	H.I. STYRENE	KYDEX	NORYL EN-185
<b>PHYSICAL</b>						
SPECIFIC GRAVITY	1.04	1.18	1.22	1.05	1.35	1.06
WATER ABSORPTION, 24 hr. (%)	0.2 - 0.45				0.06	0.06
<b>MECHANICAL</b>						
<b>TENSILE</b>						
Strength, Yield (10 <sup>3</sup> psi) @ 73°F.	4.0 - 7.0	4.7	5.0	2.6	6.3	6.5
Elongation, Ultimate (%) @ 73°F.	20 - 80			40	>100	
Modulus, Yield (10 <sup>3</sup> psi) @ 73°F.	2.3 - 4.2				310	
<b>FLEXURAL</b>						
Strength, (10 <sup>3</sup> psi) @ 73°F.	6.0 - 14.0	7.7	5.7		9.7	13.5
Modulus, Yield (10 <sup>3</sup> psi) @ 73°F.	2.0 - 4.8	2.7	2.1	230	330	340
<b>COMPRESSIVE STRENGTH</b>						
2% Offset, (10 <sup>3</sup> psi)					8.0	
<b>IMPACT STRENGTH</b>						
Izod, Notched (ft. lb./in.) @ 73°F.	1.0 - 10.0	7.0	3.0			7.0
<b>HARDNESS</b>	R75 - R115	R95	R98		R105	R113
<b>COEFFICIENT OF STATIC FRICTION</b>						
Against self						
Against steel						
<b>THERMAL</b>						
<b>CONDUCTIVITY</b>						
(BTU/Hr/Sq.Ft./Degree F./in.)					1.01	
<b>COEFF. OF THERMAL EXPANSION</b>						
(10 <sup>-5</sup> /Degree F.)						4.1
<b>SPECIFIC HEAT</b>						
(BTU/lb./Degree F.)					0.293	
<b>HEAT DEFLECTION TEMP.</b>						
(Degree F.)						
At 66 psi		190			177	
At 264 psi	200	175	174	197	165	185
<b>MAX. CONTINUOUS TEMP. (F.°)</b>	140 - 200					
<b>ELECTRICAL</b>						
<b>VOLUME RESISTIVITY</b>						
(Ohm/cm)			<5000			10 <sup>15</sup>
<b>DIELECTRIC STRENGTH</b>						
(V/Mil)	350 - 500				>429	630
<b>DIELECTRIC CONSTANT</b>						
At 60 HZ	2.4 - 5.0				3.86	2.80
At 1 MHZ					3.70	
<b>DISSIPATION FACTOR</b>						
At 60 HZ	.003 - .008					.0004
At 1 MHZ						
<b>ARC RESISTANCE (SECONDS)</b>	50 - 80		10 - 120		80	

