



**MATERIAL SPECIFICATIONS**

**CURVEIL™ 220-20**

**BARCOL HARDNESS TEST** MAT-2220

AF Number: 30394  
 Date: 6/19/97  
 Requester: Roth  
 Analyst: LHL  
 Calibration: 45

<b>Reading</b>	<b>32.7</b>
<b>Std. Dev.</b>	<b>1.7</b>

**TENSILE TEST—ENGLISH UNITS** INSTRON 4204 ASTM D-638 MAT-2202

Test type: Tensile  
 Operator name: LSJ  
 Sample Identification: 30394T7  
 Interface Type: 4200  
 Sample Rate (pts/secs): 5.0000  
 Crosshead Speed: 0.2000 in/min  
 2nd Crosshead Speed: 0.0000 in/min  
 Full Scale Load Range: 10000.000 lbf

	Maximum Tensile Strength (psi)	Modulus (ksi)	Elongation at Max. Load (%)	Stress at Yield (psi)	Elongation at Yield (%)	Elongation at Break (%)	Width (in)	Thickness (in)
<b>mean</b>	<b>2821</b>	<b>584.0</b>	<b>0.54</b>	<b>0</b>	<b>0</b>	<b>0.57</b>	<b>0.478</b>	<b>0.074</b>
<b>s.d.</b>	<b>128</b>	<b>43.7</b>	<b>0.02</b>	<b>0</b>	<b>0</b>	<b>0.05</b>	<b>0.001</b>	<b>0.003</b>

**FLEX TEST—ENGLISH UNITS** INSTRON 4202 ASTM D-790 MAT-2203 (SMOOTH SIDE UP)

Test type: Flex  
 Operator name: KLD  
 Sample Identification: 30394F7  
 Interface Type: 4200  
 Sample Rate (pts/secs): 1.0000  
 Crosshead Speed: 0.0400 in/min  
 2nd Crosshead Speed: 0.0000 in/min  
 Full Scale Load Range: 1000.000 lbf

	Flexural Strength (psi)	Tangent Modulus (ksi)	Load at Yield (lbs)	Strain at Yield (in/in)	Width (in)	Thickness (in)	Span (in)
<b>mean</b>	<b>4987.6</b>	<b>484.7</b>	<b>14.3</b>	<b>0.012</b>	<b>0.982</b>	<b>0.081</b>	<b>1.500</b>
<b>s.d.</b>	<b>240.0</b>	<b>36.1</b>	<b>1.1</b>	<b>0.001</b>	<b>0.007</b>	<b>0.003</b>	<b>0</b>

Instron Corp. Series IX Automated Materials Testing System: 7.27.00  
 Test date: Friday, June 20, 1997  
 Humidity (%): 50  
 Temperature: 73° F

*Testing performed in cooperation with  
 Ashland Chemical Physical Testing Lab.*