



# PRODUCT NEWS

Auburn Manufacturing Co.  
 29 Stack St., Middletown, CT 06457  
 Phone (860) 346-6677 FAX (860) 346-1334  
 www.auburn-mfg.co  
 email:info@auburn-mfg.com

## POLYURETHANE ELASTOMERS FROM AUBURN

**Solid polyurethane elastomers** combine many of the desirable mechanical and physical properties of rubber, plastic and metal. They can out-perform the best properties of each, depending on the particular formulation. Polyurethane comes in sheets, rolls, rods, bars, tubes - die cut shapes - and in a variety of hardnesses, tensile strengths and other properties.

**Often Tougher Than Steel** - Resists scuffing, tearing, and cutting. In tough abrasive situations, has out-lasted high carbon steel by 10 to 1.

**Hard and Elastic** - Distensible, yet firm. Extreme resistance to abrasion. Ideal for metal forming. Won't scratch or tear formed materials. Saves lead time and tooling costs.

**Conforms, Dampens and Seals** - Possesses excellent load bearing and high shock-absorbing power. Resists common chemicals, lubricants and oxygen-ozone attack.

**Many Shapes** - Parts can be die-cut from sheets. Blocks, cylinders, tubes and irregular forms can be cast.

**Excellent Thermal Properties** - Most compounds do not become brittle until -80°F (-62°C). Good for intermittent use up to +300°F (+149°C).

**Molded Urethane Sheet - 24" x 24" or 36" x 36" sheets.**  
 Available in AUB 655 (60 duro), AUB 650 (80 duro) & AUB 652 (90 duro).  
 See reverse side of page for detailed technical information on each.

THICKNESS	24" X 24"	36" X 36"
.020	-	\$ 22.28
1/32	-	33.87
3/64	-	50.69
1/16	-	66.12
3/32	-	98.69
1/8	-	120.58
3/16	\$ 70.86	159.58
1/4	78.72	177.35
5/16	94.47	212.71

THICKNESS	24" X 24"	36" X 36"
3/8	\$ 110.23	\$ 248.08
7/16	127.94	328.00
1/2	145.70	388.55
5/8	165.98	414.39
11/16	185.08	-
3/4	205.25	440.28
7/8	224.37	-
1	244.42	568.22
1-1/8	275.90	-

**Auburn** can provide custom urethane parts including gaskets, seals, diaphragms, roll covers, covered metal inserts, bumpers and pulleys. Our lines of polyurethane rod wipers, uniseals, and O-rings are included in specialized **Auburn** brochures. In addition, urethane can be provided in stock shapes such as sheets, slabs, rolls, rods, tubes, and metal or fabric backed sheet for the customer's fabrication into specific products.

<b>TYPICAL PROPERTIES OF STANDARD SHEETS.</b>	<b>AUB 655</b>	<b>AUB 650</b>	<b>AUB 652</b>
Shore Durometer (ASTM D2240-64T)	60 Durometer	80 Durometer	90 Durometer
Compression Set: (ASTM D395-61, Method B)			
22 hrs @ 150 F.	30 % max.	45 % max.	25 % max.
22 hrs @ 212 F.	45 % max.	65 % max.	45 % max.
Ultimate Tensile Strength	1000 psi	4000 psi	3500 psi
Tensile Modulus @ 100 % Elongation	100-250 psi	500-1000 psi	1300-1800 psi
@ 300 % Elongation	120-420 psi	1200-2100 psi	2200-2500 psi
Elongation at Break (ASTM-D412-61T)	500-700 %	450-650 %	450-650 %
Tension Set at Break (ASTM-D412-61T)	20 %	30 %	80 %
Lbs/In Tear Strength - Trousers Die (ASTM-D624-54T)	30	125	300
Compression Deflection (ASTM-D575-46, Method A)			
5%	30-70 psi	180-220 psi	400-500 psi
10 %	80-140 psi	350-400 psi	700-800 psi
25 %	250-350 psi	900-1100 psi	1800-2000 psi

These data were obtained using standard test methods believed to be reproducible. However, we do not guarantee these results will be obtained by others under different conditions. Polyurethane compounds with variations in properties and durometers are also available.