



Cast Acrylic Rods & Tubes

Custom and Stock Acrylic Solutions

POLYCAST
PRODUCT SELECTION GUIDE



RODS & TUBES

Polycast™ cast acrylic rods and tubes provide outstanding optical clarity, high impact resistance, superb weathering ability and excellent UV properties. A variety of sizes, thicknesses and colors are available for a wide range of applications and industrial uses.

INVENTORY AND MANUFACTURING

Featuring exceptional and consistent quality, Polycast rods and tubes are delivered with the dependability and service you expect from Polycast. We maintain a large tubing and rod inventory for quick and timely order processing. Each rod and tube is inspected, then carefully packaged and labeled with all specifications.

Our inventory tracking system ensures that we have real time information and can fill your order quickly and accurately.

MACHINING & FABRICATION

We have a fabrication and machining facility staffed by experts who are able to handle your exact needs. Available operations include flame polishing, angle cuts, drilling, chamfering and specialty machining. Any rod or tube can be cut to meet your specifications.

APPLICATIONS

Polycast Rods and Tubes are ideal for many applications, including:

- Displays
- Signage
- Medical devices
- Arts & crafts
- Aquariums
- And much more

CAST ACRYLIC TUBING

Clear cast acrylic tubing is manufactured in standard 6' lengths (random 71" to 73") and in diameters ranging from 1.25" O.D. to 27.65" O.D. Wall thicknesses of .125", .187", .250", .375" and .500" are available in most diameter tubes.

Special wall thicknesses are available on request.

CAST ACRYLIC ROD

Clear cast acrylic rods are manufactured in diameters ranging from .250" to 9.00". Tight tolerances throughout the manufacturing process ensure you receive the highest quality rods available. Standard lengths for clear rods are:

- 8' for rods .250" to 2.00" in diameter
- 6' for rods 2.125" to 3.00" in diameter
- 4' for rods 3.25" to 6.00" in diameter
- 3' for rods 6.50" to 8.00" in diameter
- 2' for rods 9.00" in diameter

Colored rods are manufactured in 46"–49.5" lengths.

CERTIFICATIONS

UL 746A: Underwriters Laboratories recognized for polymeric materials in electrical applications. Contact inside sales for further information.

NSF Grade: Polycast offers rods and tubes which meet the requirements for the National Sanitation Foundation.

FDA: Food and Drug Administration's regulations concerning food contact applications as described in 21 CFR 177.1010 for all food types, including alcoholic beverages in room temperature or refrigerated applications.

ASTM D5436: Polycast acrylic rods and tubes are manufactured in alignment with ASTM D5436.

Tight tolerances throughout the manufacturing process ensure you receive the highest quality rods available.



DATA CHART

PROPERTIES	UNITS	DATA
Refractive Index	—	1.49
Specific Gravity	—	1.19
Spectral Transmittance (Type (UVA))		
270nm	%	<5
280nm	%	<5
290nm	%	<5
310nm	%	<5
340nm	%	<5
Luminous Transmittance		
< 4.7 mm (0.187 in.) thickness	%	92
25.4 mm (1.00 in.) thickness	%	89
> 25.4 mm (1.00 in.) thickness	%	87
Haze	%	1.0
Deflection Temperature	°F (°C)	401 (205)
Water Absorption	%	0.8
Tensile Strength	psi	11,000
Elongation at Break	%	3



RODS

COLORS

STANDARD

2025	Black	2130	Pink	2465	Yellow
2026	Extra Black	2146	Ivory	2473	Copper
2044	Lt Navy Gray	2208	Yellow	2630	Brown
2050	Blue	2283	Red	3000	IRT
2054	Dk Navy Gray	2328	Dk Tan	3030	Green
2064	Gray	2370	Bronze	4000	Ultra-Brite
2069	Blue	2404	Bronze	6512	Green
2074	Gray	2414	Green	6738	Violet
2092	Green	2422	Amber	7328	White
2111	Green	2423	Red	9702	Violet
2112	Dk Green	2424	Blue	9712	Purple
2114	Blue	2447	White		

FLUORESCENT

6213	Red
6481	Green
6533	Neon Green
6677	Blue
6954	Amber

PEARL

1601	White
1603	Fluorescent Green
1705	Purple
1725	Golden Oak
1730	Black
1735	Black 'n' Gold
1740	Red
1745	Orange
1750	Blue
1755	Hot Pink
1765	Green
1770	Black Cherry
1775	Teal

Diameters for colored rods range from .500" to 3.00" in standard 4' lengths



CLEAR, POLISHED

(Machine grade rod is available upon request.)

DIAMETER	LENGTH (FT)	WEIGHT (LBS/FT)	TOLERANCE
.250	8	.026	±.005
.312	8	.039	±.005
.375	8	.056	±.005
.500	8	.100	±.010
.625	8	.158	±.010
.750	8	.227	±.010
.875	8	.309	±.010
1.000	8	.403	±.010
1.125	8	.511	±.015
1.250	8	.630	±.015
1.375	8	.762	±.015
1.500	8	.907	±.015
1.625	8	1.070	±.015
1.750	8	1.240	±.015
1.875	8	1.420	±.015
2.000	8	1.610	±.015
2.125	6	1.820	±.030
2.250	6	2.040	±.030
2.500	6	2.520	±.030
2.750	6	3.050	±.030
3.000	6	3.630	±.030
3.250	4	4.260	±.045
3.500	4	4.940	±.045
3.750	4	5.670	±.045
4.000	4	6.450	±.045
4.250	4	7.280	±.045

DIAMETER	LENGTH (FT)	WEIGHT (LBS/FT)	TOLERANCE
4.500	4	8.200	±.045
4.750	4	9.100	±.045
5.000	4	10.100	±.045
5.250	4	11.100	±.045
5.500	4	12.200	±.045
5.750	4	13.300	±.045
6.000	4	14.600	±.045
6.500	3	17.200	±.060
7.000	3	20.000	±.060
7.500	3	22.800	±.060
8.000	3	26.000	±.060
9.000	2	29.259	±.060



TUBES

COLORS

6000	White (Translucent)
6100	Black
6300	Opaque White
6400	Red
6450	Rose
6500	Green
6600	Blue
6681	Gas Pump Blue
6700	Amber

TOLERANCES

NORMAL O.D.	PLUS/MINUS
1.250" – 3.000"	.020
3.125" – 3.875"	.030
4.000" – 6.000"	.045
6.250" – 12.000"	.065
12.250" – 27.625"	.125



Spartech™ acrylic tubes provide outstanding optical clarity and high impact resistance



CLEAR, POLISHED 71"–73" LENGTHS

(Custom lengths can be cut for a charge.)

O.D.	WEIGHT (LBS/FT)				
	.125"	.187"	.250"	.357"	.500"
1.250	.215	.306	.378		
1.500	.277	.397	.504		
1.625	.303	.435	.555		
1.750	.328	.473	.605		
1.875	.355	.489	.630		
2.000	.370	.548	.706	.889	1.075
2.250	.429	.624	.807	1.060	1.353
2.375	.453	.662	.857	1.145	1.431
2.500	.479	.699	.908	1.233	1.499
2.625	.483	.703	.950	1.297	1.635
2.750	.529	.775	1.008	1.437	1.703
2.875	.545	.813	1.059	1.513	1.806
3.000	.580	.851	1.109	1.588	1.932
3.125	.605	.889	1.168	1.664	2.030
3.250	.630	.926	1.210	1.740	2.126
3.375	.655	.964	1.260	1.815	2.223
3.500	.681	1.002	1.311	1.891	2.420
3.625	.705	1.039	1.362	1.967	2.520
3.750	.731	1.078	1.412	2.043	2.622
3.875	.757	1.115	1.462	2.119	2.724
4.000	.781	1.154	1.512	2.193	2.824
4.124	.807	1.191	1.564	2.269	2.925
4.250	.833	1.230	1.614	2.344	3.025
4.375	.860	1.275	1.664	2.420	3.125
4.500	.883	1.305	1.715	2.496	3.227
4.625	.908	1.342	1.765	2.572	3.329
4.750	.933	1.381	1.815	2.648	3.429
4.875	.957	1.417	1.865	2.722	3.529
5.000	.983	1.455	1.915	2.798	3.630
5.250	1.034	1.533	2.170	2.950	3.832
5.500	1.084	1.609	2.092	3.101	4.033
5.625	1.108	1.644	2.168	3.177	4.134
5.750	1.134	1.683	2.219	3.253	4.235
6.000	1.184	1.759	2.319	3.403	4.437

O.D.	WEIGHT (LBS/FT)				
	.125"	.187"	.250"	.357"	.500"
6.093	1.204	1.786	2.357	3.459	4.513
6.250	1.255	1.831	2.388	3.583	4.677
6.500	1.280	1.910	2.522	3.706	4.841
6.750	1.340	1.963	2.575	3.864	5.077
7.000	1.389	2.060	2.722	4.008	5.244
7.250	1.450	2.115	2.800	4.047	5.395
7.500	1.488	2.214	2.925	4.311	5.647
7.626	1.502	2.234	2.950	4.359	5.730
8.000	1.588	2.634	3.125	4.613	6.051
8.250	1.639	2.440	3.227	4.765	6.252
8.500	1.689	2.515	3.329	4.916	6.454
8.750	1.739	2.591	3.445	5.068	6.656
9.000	1.789	2.659	3.529	5.218	6.857
9.125	1.800	2.705	3.560	5.280	6.902
9.250	1.841	2.743	3.360	5.370	7.059
9.500	1.891	2.819	3.732	5.505	7.261
10.000	1.989	2.969	3.932	5.832	7.661
10.500	2.090	3.120	4.134	6.125	8.201
10.625	2.140	3.186	4.152	6.155	8.402
11.000	2.193	3.271	4.336	6.428	8.741
11.500	2.294	3.424	4.539	6.7352	8.874
11.750	2.398	3.499	4.641	6.882	9.074
12.000	2.421	3.574	4.739	7.033	9.278
12.500	2.540	3.720	4.930	7.310	9.650
13.625	2.620	3.924	5.207	7.718	10.149
14.000	2.800	4.235	5.550	8.245	10.891
15.000	3.001	4.485	5.953	8.858	11.698
16.000	3.187	4.600	6.221	9.077	12.023
18.000	3.610	5.201	7.026	10.209	13.886
20.000	4.167	6.441	8.229	12.135	15.180
24.000	4.650	7.126	9.395	13.701	18.463
27.625	5.380	7.836	10.585	16.007	22.601

We are a leading plastics manufacturer that leverages our knowledge of materials, processing, and application development to deliver the highest level of value to our customers.



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