

APPLICATIONS:

ENVIRONMENTAL TEST TUBES
PACKAGING TUBES
MARINE / AQUARIUM
PNEUMATIC
CONVEYING TUBES
SIGHT GLASSES
SHIPPING TUBES
BANK TUBES
SCIENTIFIC PACKAGING
TOYS
SPORTING GOODS
CONTAINERS WITH END CAPS
HARDWARE PACKAGING

Tenite Butyrate, Transparent, Tough, & Durable

- Scuff & Impact Resistant
- Ideal for thin-walled applications where superior toughness and durability are required
- Low water absorption
- Minimal dimensional changes in varying humidity
- Chemically Resistant
- Working temp. -40°F to 180°F

Excelon® CAB is ideally suited for plastic packaging, especially for scientific products.

CAB's optical clarity and scuff and impact resistance allows for easy fabrication. It can be cut and cement bonded.

The exceptional permanence and dimensional stability of Excelon® CAB make it ideal for thinwalled applications where superior toughness, rigidity and durability are required. Because of its low water absorption characteristics, Excelon® CAB exhibits minimal dimensional change in environments of varying humidity.

Excelon® CAB extruded tubing is stocked as clear tubing. An unlimited range of transparent, translucent, and opaque colors are available upon request in pearlescent and metallic effects. Specific formulations are available for tints and colors with performance additives for ultra-violet stabilization, flame retardant and radiation resistance.

Excelon® CAB can be custom ordered from .250" - 8" OD in a variety of lengths, wall thicknesses, and colors.

PHYSICAL PROPERTIES

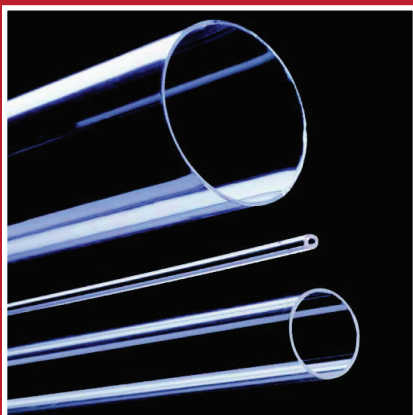
Standard extrusions and stock tubing are of the MH flow grade. Other flow grades are available on special order. All tests performed on injection molded specimens .225" thick at 73°F (23°C) and 50% relative humidity unless otherwise specified.

PROPERTIES ^a	TEST METHOD ^b	VALUE, UNITS ^c
Specific Gravity	D 792	1.19
Plasticizer	—	10%
MECHANICAL PROPERTIES		
Tensile Stress @ Yield	D 638	33.1 MPa (4800 psi)
Tensile Stress @ Break	D 638	43.4 MPa (6300 psi)
Elongation @ Break	D 638	50%
Flexural Modulus	D 790	1379 MPa (2.00 x 10 ⁵ psi)
Flexural Yield Strength	D 790	45.5 MPa (6600 psi)
Rockwell Hardness, R Scale	D 785	78
Izod Impact Strength, Notched @ 23°C (73°F)	D 256	240 J/m (4.5 ft-lbf/in.)
Izod Impact Strength, Notched @ -40°C (-40°F)	D 256	96 J/m (1.8 ft-lbf/in.)
THERMAL PROPERTIES^d		
Deflection Temperature @ 1.82 MPa (264 psi)	D 648	74°C (165°F)
Deflection Temperature @ 0.455 MPa (66 psi)	D 648	85 °C (185°F)
Vicat Softening Temperature	D 1525	104°C (219°F)
PERMANENCE PROPERTIES		
Water Absorption, 24 hour immersion	D 570	1.4%
Soluble Matter Loss	D 570	0.10%
Weight Loss on Heating , 72 hours @ 80°C (176°F)	D 707	0.50%

Stock lengths are 6' and 8' lengths depending on the size.

Custom sizes, lengths, and colors are available upon request.

REGULATORY COMPLIANCE: REACH, RoHS, and Prop 65 compliant



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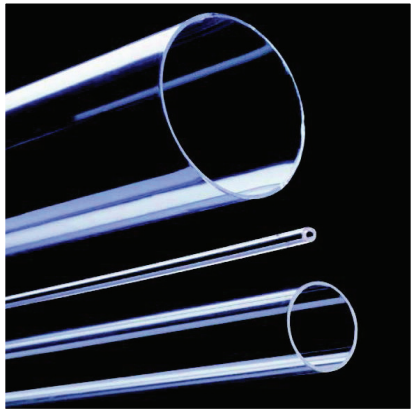
PHYSICAL PROPERTIES (CONTINUED)

PROPERTIES ^a	TEST METHOD ^a	VALUE, UNITS ^c
MISCELLANEOUS BUTYRATE PROPERTIES		
Refractive Index, n_D	D 542	1.46-1.49
Light Transmission ^e	E 308	>90%
Haze ^e	D 1003	<8.5%
Specific Heat @ 23°C (73°F)	DSC	1.26-1.67 kJ/kg·K (0.301-0.399 Btu/lb·°F)
Thermal Conductivity	C 177	0.17-0.33 W/m·K (1.2-2.3 Btu-in./h·ft²·°F)
Coefficient of Linear Thermal Expansion	D 696	11-17 x 10 ⁻⁵ /°C (mm/mm·°C) (6-9 x 10 ⁻⁵ /°F (in./in.·°F))
Mold Shrinkage	D 955	0.2-0.6%
Dielectric Strength	D 149	11.8-18.7 kV/mm (300-475 V/mil)
Dielectric Constant @ 1 MHz	D 150	3.3-3.8
Dissipation Factor @ 1 MHz	D 150	0.01-0.15
Volume Resistivity	D 257	10 ¹³ -10 ¹⁵ ohm-cm

Values listed are typical and are meant only as a guide to aid in design. Field testing should be performed to find the actual values for your application.

CAB SIZING CHART

ITEM NO.	ID	OD	WALL	FT / CTN
47020	.125	.187	.031	4800
47021	.125	.250	.062	2550
47030	.187	.250	.031	2700
47031	.187	.312	.062	1500
47040	.250	.312	.031	3150
47041	.250	.375	.062	1500
47050	.312	.375	.031	2100
47051	.312	.437	.062	1260
47060	.375	.437	.031	1800
47061	.375	.500	.062	1140
47063	.375	.625	.125	492
47070	.437	.500	.031	1350
47081	.500	.625	.062	840
47083	.500	.750	.125	390
47101	.625	.750	.062	438
47110	.687	.750	.031	600
47121	.750	.875	.062	570
47123	.750	1	.125	300
47132	.812	1	.093	360
47141	.875	1	.062	360
47150	.937	1	.031	360
47161	1	1.125	.062	330
47163	1	1.250	.125	216
47181	1.125	1.250	.062	288
47190	1.187	1.250	.031	270
47221	1.375	1.500	.062	192
47230	1.437	1.500	.031	300
47261	1.625	1.750	.062	144
47270	1.687	1.750	.031	210
47283	1.750	2	.125	108



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CAB SIZING CHART (CONTINUED)

ITEM NO.	ID	OD	WALL	FT / CTN
47301	1.875	2	.062	108
47310	1.937	2	.031	108
47323	2	2.250	.125	90
47341	2.125	2.250	.062	90
47350	2.187	2.250	.031	90
47363	2.250	2.500	.125	72
47381	2.375	2.500	.062	72
47390	2.437	2.500	.031	72
47421	2.625	2.750	.062	54
47430	2.687	2.750	.031	54
47443	2.750	3	.125	48
47461	2.875	3	.062	48
474639	2.906	3	.047	48
47523	3.250	3.500	.125	48
47603	3.750	4	.125	40
47643	4	4.250	.125	32
47763	4.750	5	.125	16
47923	5.750	6	.125	16



21649 Cedar Creek Ave
Georgetown, DE 19947
P: 302-855-0139
E: tpisales@excelon.com
www.thermoplasticprocesses.com

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