## **McMASTER-CARR**®

## Clear Impact-Resistant Polycarbonate Rectangle Tube 2" x 2" Outside Size

In stock \$14.91 per ft. 3161T41



Material	Polycarbonate Plastic
Shape	Rectangular Tube
Texture	Smooth
Color	Clear
Clarity	Clear
Light Transmission	88%
Outside	0070
Height	2"
Height Tolerance	-0.030" to 0.030"
Width	2"
Width Tolerance	-0.030" to 0.030"
Wall Thickness	0.080"
Wall Thickness	
Tolerance	-0.008" to +0.008"
Tolerance Rating	Standard
Lg.	5 ft.
Hardness	Rockwell R118
Hardness Rating	Hard
For Use Outdoors	No
Temperature	-40° to 200° F
Range	
Impact Strength	12-18 ftlbs./in.
Impact Strength	Excellent
Rating	
Tensile Strength	8,900-9,500 psi
Tensile Strength	Good
Rating	
Chemical	
Resistance	
Excellent	Bleach, Diesel Fuel, Gasoline, Hydrogen Peroxide, Isopropyl Alcohol, Phosphoric Acid, Water
Moderate	Acetic Acid, Coolant, Fuel Oil, Nitric
	Acid
Not Recommended	Acetone, Hydrochloric Acid, Methanol, Methyl Ethyl Ketone (MEK), Sodium Hydroxide, Sulfuric Acid
Not Rated	Chlorine, Heating Oil, Hydraulic Fluid, Kerosene, Lacquer Solvents, Mineral Oil, Synthetic Oil, Vegetable Oil

https://www.mcmaster.com/3161T41

Fabrication	e, 2" x 2" Outside Size   McMaster-Carr Extruded	
Density	0.043 lbs./cu. in.	
Flexural Modulus	320,000-350,000 psi	
Flexibility	Semi-Rigid	
Coefficient of		
Friction	Not Rated	
Friction Rating	Not Rated	
Dielectric Strength	380 V/mil	
Electrical	Good	
Insulation Rating		
Water Absorption	0.15-0.2%	
Water Absorption	Good	
Rating		
Coefficient of Thermal Expansion	3.7 to 3.8 × 10 <sup>-5</sup> in./in/°F	
Thermal Stability	Good	
Comparable To	Hygard, Hyzod, Lexan, Lexgard, Makrolon, Margard, Tuffak, Zelux	
Performance Properties	Clear, Easy to Thermoform, Electrical Insulator, Food Contact, High Strength, Impact Resistant, Low Thermal Expansion, Low Water Absorption, Multipurpose	
For Use With	Bleach, Diesel Fuel, Gasoline, Hydrogen Peroxide, Isopropyl Alcohol, Phosphoric Acid, Water	
Specifications Met	Made of FDA Listed Material, UL 94HB	
Warning Message	Physical and mechanical properties are not guaranteed. They are intended only as a basis for comparison and not for design purposes.	
RoHS	RoHS 3 (2015/863/EU) Compliant	
REACH	REACH (EC 1907/2006) (01/16/2020, 205 SVHC) Compliant	
Country of Origin	United States	

Comparable to Lexan, Hyzod, Tuffak, and Makrolon, these polycarbonate tubes are half the weight of glass and maintain excellent impact resistance across a wide temperature range. Use them to make instrument gauge covers and display racks.