

Redco[™] PVC

PROPERTY	ASTM or UL TEST	RIGID	FLEXIBLE	FOAM			
PHYSICAL							
SPECIFIC GRAVITY	D792	1.30-1.58	1.20-1.70	0.45-0.8			
SPECIFIC VOLUME (in3/lb)	D792	19.1-20.5	-				
WATER ABSORPTION, 24h, 1/8-in thk (%)	D570	0.04-0.4	0.15-0.75	0.03-0.04			
MECHANICAL							
TENSILE STRENGTH (psi)	D638	6,000-8,000	1,500-3,500	2000-3000			
ELONGATION (%)	D638	50-150	200-450				
TENSILE MODULUS (105 psi)	D638	3.5-10	-	1-2.4			
FLEXURAL MODULUS (105 psi)	D790	3-8	-				
IMPACT STRENGTH, IZOD (ft-lb/in of notch)	D256	0.4-20.0	-	4-9			
HARDNESS, ROCKWELL M	D785	D65-85	A50-100	4-9			
CHARPY IMPACT UNNOTCHED	D256			0.4-0.6			
THERMAL							
THERMAL CONDUCTIVITY (10-4 cal-cm/sec-cm2- ºC)	C177	3.5-5.0	3.0-4.0	0.05-3			
COEFFICIENT OF THERMAL EXPANSION (10-5 in/in- ºF)	D696	1.2-5.6	3.9-13.9	3-4.5			
DEFLECTION TEMPERATURE (°F)	D648						
AT 264 psi 140-170		-					
AT 66 psi 135-180		-		145-150			
NORMAL TEMPERATURE RANGE ºF (ºC)			Max 160 (70) Min -22 (-30)				
ELECTRICAL							
DIELECTRIC STRENGTH (V/mil)	D149						
SHORT TIME, 1/8-in thk	1	350-500	300-400				
DIELECTRIC CONSTANT	D150						
AT kHz 3.0-3.8		4.0-8.0					
VOLUME RESISTANCY (ohm-cm)	D257						
AT 73ºF, 50% RH		>1016	1011-1015				
ARC RESISTANCE (s)	D495	60-80	-				

We cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used. We accept no responsibility for results obtained by the application of this information or the safety and suitability of our products, whether alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product combination for their own purposes. Unless otherwise agreed in writing, we sell the products without warranty, and buyers and users assume all responsibility and liability for loss or damage arising from the handling and use of our products, whether used alone or in combination with other products. For most recent technical information, phone in USA or in Canada.



Redco[™] POLYVINYL CHLORIDE (PVC)

METRIC

PROPERTY	ASTM or UL TEST	RIGID	FLEXIBLE	FOAM
PHYSICAL				
SPECIFIC GRAVITY	D792	1.30-1.58	1.20-1.70	0.45-0.8
SPECIFIC VOLUME in3/lb (cm3/g)	D792	19.1-20.5 (528-567)	-	
WATER ABSORPTION, 24h, 1/8-in thk (%)	D570	0.04-0.4	0.15-0.75	0.03-0.04
MECHANICAL				
TENSILE STRENGTH PSI (MPa)	D638	6,000-8,000 (41-55)	1,500-3,500 (10-24)	2000-3000 (13-21)
ELONGATION (%)	D638	50-150	200-450	
TENSILE MODULUS PSI (MPa)	D638	350000-1000000 (2410-6800)	-	100000-240000 (690-1655)
FLEXURAL MODULUS PSI (MPa)	D790	300000-800000 (2068-5517)	-	
IMPACT STRENGTH, Izod ft-Ib/in OF NOTCH (J/m of notch)	D256	0.4-20.0 (21-1080)	-	4-9 (216-486)
HARDNESS, ROCKWELL M	D785	D65-85	A50-100	4-9
CHARPY IMPACT UNNOTCHED	D256			0.4-0.6
THERMAL				
THERMAL CONDUCTIVITY 10-4 cal-cm/ sec-cm2- ^o C (10-4 BTU in/hr-ft2-°F)	C177	3.5-5.0 (1.02-1.5)	3.0-4.0 (0.9-1.2)	0.05-3 (0.01-0.9)
COEFFICIENT OF THERMAL EXPAN- SION 10-5 in/in- ºF (10-5 m/m/°C)	D696	1.2-5.6 (2.1-10)	3.9-13.9 (7-25)	3-4.5 (5.4-8.1)
DEFLECTION TEMPERATURE (°F)	D648			
AT 264 psi 140-170		-		
AT 66 psi 135-180		-		145-150
ELECTRICAL				
DIELECTRIC STRENGTH V/mil (KV/mm)	D149			
SHORT TIME, 1/8-in thk		350-500 (13.8-19.8)	300-400 (11.9-15.8)	
DIELECTRIC CONSTANT	D150			
AT kHz 3.0-3.8		4.0-8.0		
DISSIPATION FACTOR	D150			
AT 1 KHz 0.009		0.07		
-0.017		-0.16		
VOLUME RESISTANCY (ohm-cm)	D257			
AT 73⁰F, 50% RH		>1016	1011-1015	
ARC RESISTANCE (s)	D495	60-80	-	

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