

Adhesive Calculation Tables

Liquid Or Paste Estimates			
Bead Size Diameter	Cubic Inches 1000 Lineal Ft	Gal. per 1000 Lineal Ft.	Lineal Foot per Gallon
1/16"	36.8	0.16	6000
3/32"	82.9	0.36	2700
1/8"	147.3	0.64	1500
3/16"	331.7	1.44	675
1/4"	589.1	2.55	375
5/16"	920.4	3.98	240
3/8"	1325.4	5.74	165
1/2"	2356.2	10.20	95
5/8"	3861.6	15.92	50
3/4"	5300.5	22.95	35
1"	9424.8	40.80	19

Hot Melt Consumption Chart		
Bead Size	Linear Feet Per Pound	Pounds per Linear Foot
1/32"	6000	0.00017
1/16"	1500	0.00067
3/32"	850	0.00118
1/8"	500	0.00200
3/16"	300	0.00333
1/4"	210	0.00476
5/16"	115	0.00870
3/8"	50	0.02000

Bead Length Chart for Structural Adhesives				
Ratio Cartridge	1/4" Wide Half Round Bead	3/8" Wide Half Round Bead	1/2" Wide Half Round Bead	5/8" Wide Half Round Bead
10:1 Ratio 380 ml	945" Per Cartridge	420" Per Cartridge	236" Per Cartridge	151" Per Cartridge
1:1 Ratio 400 ml	995" Per Cartridge	442" Per Cartridge	248" Per Cartridge	159" Per Cartridge
1:1 Ratio 50 ml	124" Per Cartridge	55" Per Cartridge	31" Per Cartridge	20" Per Cartridge
Bulk 10:1 or 1:1	9450" Per Cartridge	4200" Per Cartridge	2360" Per Cartridge	1510" Per Cartridge

Area Calculations	
c = circumference	L = length
d = diameter	a = area
r = radius	s = side
a = altitude	s1 + s2 = Parallel Sides
b = base	
Circumference of a circle	= d x 3.1416
Area of a circle	= r ² x 3.1416
Area of a square	= s ²
Area of a triangle	= $\frac{1}{2}$ b x a
Area of a rectangle	= b x a
Surface of a cube	= s ² x 6
Surface of a cylinder	= (2 x r ² x 3.1416) + (d x L x 3.1416)
Volume of a cube	= s ³
Volume of a cylinder	= r ² x 3.1416 x L

Equivalents	
1 cubic foot	= 1728 cubic inches
1 gallon	= 128 ounces
1 gallon	= 231 cubic inches
1 cubic foot	= 7.48 gallons
1 gallon water	= 8.33 pounds
1 pound	= 454 grams
1 inch	= 2.54 centimeters
1000 milliliters	= 1 liter
100 centiliters	= 1 liter
2 cups	= 1 pint
2 pints	= 1 quart
4 quarts	= 1 gallon

Fahrenheit to Centigrade (Celsius)		
-60 = -51	60 = 15.6	260 = 127
-50 = -46	70 = 21.1	280 = 138
-40 = -40	80 = 26.7	300 = 149
-30 = -34	90 = 32.2	320 = 160
-20 = -29	100 = 37.8	340 = 171
-10 = -23	120 = 48.9	360 = 182
0 = -18	140 = 60	380 = 193
10 = -12	160 = 71.1	400 = 204
20 = -6.7	180 = 82.2	500 = 260
30 = -1.1	200 = 93.3	600 = 316
40 = 4.4	220 = 104	700 = 371
50 = 10	240 = 116	800 = 427
Degrees Celsius = Multiply .56 (after subtracting 32)		
Degrees Fahrenheit = Multiply 1.8 (then add 32)		

Need additional technical help?

For additional questions regarding adhesives applications, contact us at 317-834-5415.