

Green Room Epoxy System: Tips for measuring and mixing epoxy.

Green Room highly recommends that the epoxy ratios be done by weight! This gives better ratios and is actually faster and cheaper in the long run than using graduated mixing cups. All Green Room epoxy ratios are 100 parts resin to 44 parts hardener by weight. A cheap digital scale* that measures in grams to one decimal place is great. Here is Dr. Rob's fool proof method for accurate mix ratios. We like to get a big button calculator and tape it to the wall next to the scale.

*(use US coins for quick scale check: 10 US state quarters weigh 56.7 gm
http://www.usmint.gov/about_the_mint/?action=coin_specifications).

1. Make sure your scale capacity will handle the total weight of the mix plus bucket.
2. Put your container on the scale and hit tare...reading will go to 0.0
3. Pour in your hardener first ... say you pour 101.2 gm (We find that pouring the hardener first gives better mixing into the corners of the bucket.)
4. Calculate the amount of resin needed.
 - a. Take the grams of hardener and DIVIDE by 0.44
 - b. In this example, $101.2 \div 0.44 = 230.0$
5. Without removing the container with hardener from the scale, re-tare the scale...reading will again go to 0.0
6. Pour in the right amount of resin, in this case 230.0 gm. The resin weight must be within $\pm 2\%$ of the target weight (in this case 4.6 gm too much or too little would be in range but closer is better) to ensure proper curing.
7. Add dye or pigment if desired....no more than 5% by weight of total mix.
8. Remove from scale and gently, but thoroughly mix for 2 to 4 minutes, scraping the sides and bottom with the mixing stick. Try not to whip in a lot of bubbles.
9. Ready for use

Green Room Epoxy System				
By weight mix amounts		gives these volumes		
Grams of resin	Grams of hardener	Mixed mL	mixed fluid oz	other useful conversions
10	4.4			
20	8.8			
30	13.2			
40	17.6			
50	22.0			
60	26.4			
70	30.8			
80	35.2			
90	39.6			
100	44.0	130	4.4	
110	48.4			
120	52.8			
130	57.2			
140	61.6			
150	66.0	195	6.6	typical HPSB bottom hot coat
160	70.4			
170	74.8			
180	79.2			
190	83.6			
200	88.0	261	8.8	typical HPSB deck hot coat
210	92.4			
220	96.8			
230	101.2			
240	105.6			
250	110.0			
260	114.4			
270	118.8	352	11.9	Beer can
280	123.2			
290	127.6			
300	132.0	391	13.2	typical HPSB bottom lam
310	136.4			
320	140.8			
330	145.2			
340	149.6			
350	154.0			
360	158.4	469	15.9	pint - tall boy
370	162.8			
380	167.2			
390	171.6			
400	176.0	521	17.6	typical HPSB deck lam
410	180.4			
420	184.8			
430	189.2			
440	193.6			
450	198.0			
460	202.4			
470	206.8			
480	211.2			
490	215.6			
500	220.0	651	22.0	

Green Room Epoxy System				
By weight mix amounts		gives these volumes		
Grams of resin	Grams of hardener	Mixed mL	mixed fluid oz	other useful conversions
510	224.4			
520	228.8			
530	233.2			
540	237.6			
550	242.0			
560	246.4			
570	250.8			
580	255.2	756	25.6	it's a fifth!
590	259.6			
600	264.0	782	26.4	
610	268.4			
620	272.8			
630	277.2			
640	281.6			
650	286.0			
660	290.4			
670	294.8			
680	299.2			
690	303.6			
700	308.0	912	30.8	
710	312.4			
720	316.8			
730	321.2	951	32.2	Quart
740	325.6			
750	330.0			
760	334.4			
770	338.8	1003	33.9	Liter
780	343.2			
790	347.6			
800	352.0	1042	35.2	
810	356.4			
820	360.8			
830	365.2			
840	369.6			
850	374.0			
860	378.4			
870	382.8			
880	387.2			
890	391.6			
900	396.0	1173	39.7	
910	400.4	1186	40.1	Big 4-0
920	404.8			
930	409.2			
940	413.6			
950	418.0			
960	422.4			
970	426.8			
980	431.2			
990	435.6			
1000	440.0	1303	44.1	