

RECOMMENDED VENTILATION FOR VARIOUS SIZED TANKS

Size of Tank	Volume in Cubic Feet	Cubic Feet of Solvent Vapor to Make 1% by Volume	Gallons of Coating Used to Make 1% by Volume of Solvent Vapor in Air	Air Changes per Hour Needed to Keep Solvent to 1% by Volume	Gallons of coating Sprayed in One Hour	Minutes Required to Change Air to Keep Solvent to 1% by Volume ¹	Recommended Suction Fan to Keep the Air Far Below Any Explosive Limit (Cubic Feet per Minute)	Recommended Changes of Air to Keep Solvent Fumes Far Below Explosive Limit
5,000 gals	668	6.7	.26	19.30	5	3	1,000	40 seconds
10,000 gals	1,336	13.4	.52	9.60	5	6	2,000	40 seconds
25,000 gals	3,342	33.4	1.30	3.80	10	8	2,000	1.7 seconds
50,000 gals	6,684	66.8	2.60	3.80	10	16	3,000	2.2 minutes
100,000 gals	13,378	133.6	5.20	1.90	10	31	5,000	2.7 minutes
250,000 gals	33,420	334.2	13.00	0.77	20	40	10,000	3.3 minutes
400,000 gals	53,500	535.0	20.80	0.48	20	62	10,000	5.4 minutes
13,500 bbls	75,800	758.0	29.40	0.34	50	35	25,000	3.0 minutes
27,000 bbls	151,600	1516.0	58.80	0.26	50	70	35,000	4.3 minutes
50,000 bbls	280,000	2800.0	108.30	0.14	50	130	50,000	5.6 minutes

¹ This data is based on a specific coating. To obtain the gallons required of any coating to make 1% by volume of solvent vapor in air:

- a. Multiply the percent solvents by volume by the cubic feet of solvent vapor per gallon. If there is more than one solvent, multiply the percentage of each by the cubic feet of vapor per gallon and add them. This will give the cubic feet of solvent vapor per gallon of coating.
- b. Divide the cubic feet of solvent vapor to make 1% by volume by the cubic feet of solvent vapor per gallon of coating.

$$\frac{\text{Cubic Feet of Solvent Vapor to Make 1\% by Volume}}{\text{Cubic Feet of Solvent Vapor per Gallon of Coating}}$$

This will give the gallons of coating required to make 1% by volume of solvent vapor in air.