TIPS OF THE TRADE

RECOMMENDED VENTILATION FOR VARIOUS SIZED TANKS

BLASTONE
SUPERIOR PERFORMANCE

Size of tank	5,000 gals	10,000 gals	25,000 gals	50,000 gals	100,000 gals	250,000 gals	400,000 gals	13,500 bbls	27,000 bbls	50,000 bbls
Volume (Cuft)	668	1,336	3,342	6,684	13,378	33,420	53,500	75,800	151,600	280,000
Cubic feet of solvent vapor to make 1% by volume	6.7	13.4	33.4	66.8	133.6	334.2	535.0	758.0	1516.0	2800.0
Gallons of coating used to make 1% by volume of solvent vapor in the air	0.26	0.52	1.30	2.60	5.20	13.00	20.80	29.40	58.80	108.30
Air changes per hour needed to keep solvent to 1% by volume	19.30	9.60	3.80	3.80	1.90	0.77	0.48	0.34	0.26	0.14
Gallons of coating sprayed in one hour	5	5	10	10	10	20	20	50	50	50
Minutes required to change air to keep solvent to 1% by volume[1]	3	6	8	16	31	40	62	35	70	130
Recommended suction fan to keep the air far below any explosive limit (CUFT per minute)	1,000	2,000	2,000	3,000	5,000	10,000	10,000	25,000	35,000	50,000
Recommended changes of air to keep solvent fumes far below explosive limit	40 seconds	40 seconds	1.7 seconds	2.2 minutes	2.7 minutes	3.3 minutes	5.4 minutes	3.0 minutes	4.3 minutes	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.

Cubic Feet of Solvent Vapor to Make 1% by Volume
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.