AtmosAir vs. VOCs - Syracuse University Lab Test Full-Scale Chamber Testing of Air Cleaner Performance for the Removal of Volatile Organic Compounds

TVOC Testing - Third Party Chamber Testing of AtmosAir vs. VOCs with Syracuse University Center of Excellence Laboratory.

Time from turn on AC (hr)	hexane	2-butanone	iso-butanol	toluene	tetrachloroethylene	hexanal	ethylbenzene	decane
0.000	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
0.225	87.4%	84.3%	68.6%	87.1%	88.7%	79.6%	89.4%	93.7%
1.008	63.9%	63.8%	32.1%	57.4%	61.1%	36.9%	58.9%	65.6%
2.008	43.6%	36.6%	20.9%	31.9%	40.0%	12.9%	34.0%	36.3%
4.075	21.1%	25.7%	9.4%	11.2%	18.8%	5.1%	11.0%	12.4%



Study Conclusion

Test results showed good regression and repeatability between the two duplicate tests. Test indicated that AtmosAir air cleaners reduced the concentrations in the chamber air (57.12 m3 in volume) for Hexane by 94.6%, 2-Butanone by 91.1%, Iso-butanol by 97.1%, Toluene by 98%, Tetrachloroethylene by 94.5%, Hexanal by 97.5%, Ethylbenze by 96.3% and Decane by 96.4% over the 6 hours pull-down test period. These corresponded to the equivalent clean air delivery rate (CADR) for the two units tested to range from 12 cfm to 22.5 cfm, depending of the VOCs.