

MRSA Test Results from Korea Test Institute (KTL)

1. Test Method: KOA AS 01 is the test standard for Korea Air Sterilizer Association.

Description		Contents	Remarks
Test Code		KOA AS 01	
Airborne Bacteria Sterilization Performance	Test Chamber	60±0.5 m ³	
	Test Strain	Staphylococcus epidermidis (ATCC 12228)	
	Incubating Time	24 Hours	
	Removal Rate Calculation Formula	$N_i = (1 - S_c / C_i) \times 100$	
	Test Laboratory	Korea Test Institute (KTL)	
Hazardous Gas Removal Performance	Test Chamber	4.0±0.1 m ³	
	Measuring Instrument	FT-IR	
	Test Gases	5 kinds of Gases (Toluene, Ammonia, Acetaldehyde, Formaldehyde, Acetic Acid)	
	Measuring Time	120 Minutes	
	Removal Rate Calculation Formula	$\eta_{i,n} = 1 - C_{i,n} / C_{i,o} \times 100$	
	Test Laboratory	Korea Test Institute (KTL)	
Ozone Emission Test	Test Chamber	27 m ³	
	Measuring Instrument	Ozone Concentration Analyzer	
	Measuring Method	Real-time Continuous Measurement	
	Test Laboratory	Korea Basic Electric Power Research Institute	
Noise Measure Test	Test Chamber	Anechoic Room	
	Measuring Position	1m Height	
	Calculation Method	The average value of the front portion, the rear portion, the left and right side portions, the rear portion	
	Test Laboratory	Korea Test Institute (KTL)	

2. Test Results

Description		Limit of KOA AS 01	Test Results of VIRUSKILLERS			Remarks
			VK-BLUE	VK-001 and VK-002	VK-102 and VK-102	
Release of Harmful Substances	Particulate matter	4.0 under	0.052	0.083	0.083	mg/hr
	TVOC's	18.0 under	0.276	0.088	0.088	
	Acetaldehyde	1.8 under	0.037	0.024	0.024	
	Formaldehyde	1.8 under	0.184	0.063	0.063	
Airborne Bacteria Removal Rate		80% over	96.3 %	99.1%	99.4%	60 min
Harmful Gas Deodorization Rate	Ammonia	30% over	63%	81%	79%	120 min
	Acetic Acid	30% over	100%	100%	100%	
	Toluene	30% over	100%	100%	100%	
	Acetaldehyde	30% over	88%	100%	100%	
	Formaldehyde	30% over	71%	82%	95%	
Ozone Release		0.05 x 10 ⁻⁶ under	-0.02ppm (Below "0" means no detection)	-0.016ppm (Below "0" means no detection)	-0.014ppm (Below "0" means no detection)	8 hr
Noise		50 dB	46.1dB	46.5dB	47.7dB	