

SAPHAI AIR

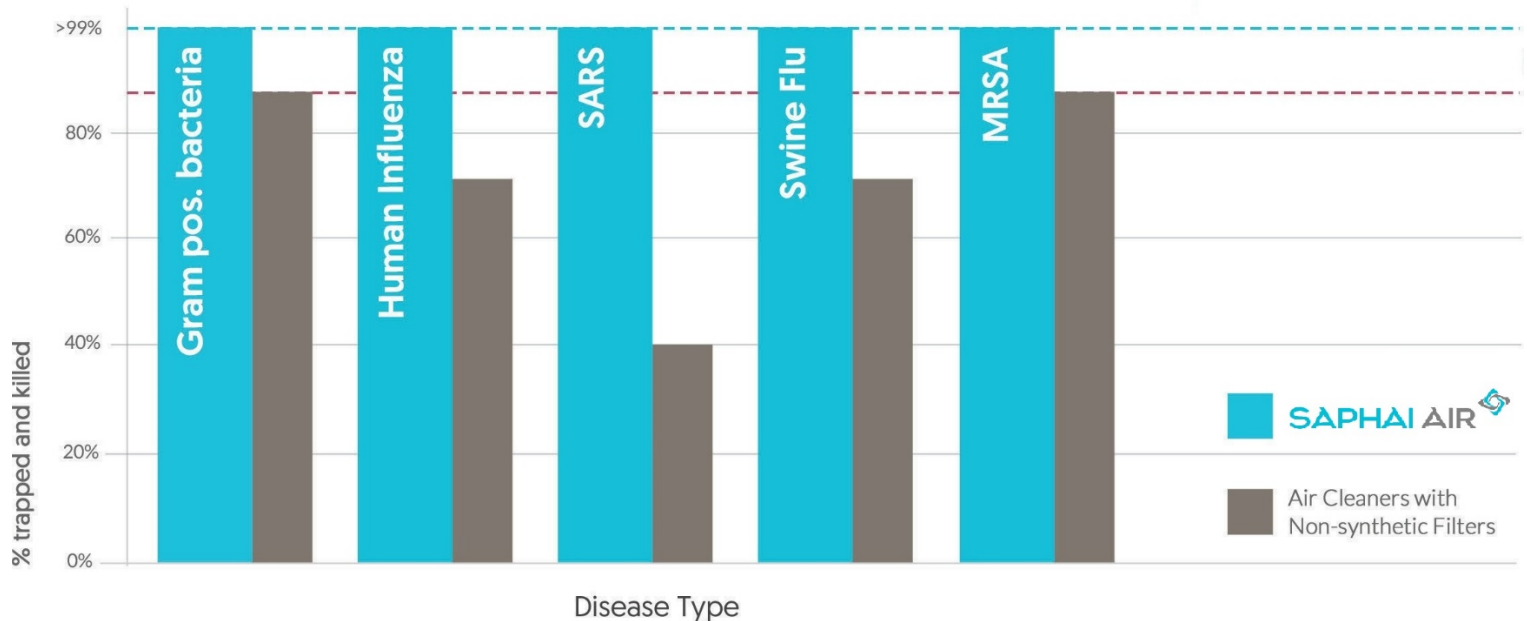
Eliminating airborne bacteria and viruses

Effective against aerosolised Coronavirus

Ultra-quiet system for home or office



How  outperforms other brands



For a safer, more comfortable facility



GP waiting rooms

Prevent patient cross-infection, kills microbes and prevents the spread of colds and flus.



Hospital rooms

Traps and kills a range of bacteria such as MRSA and C-Diff and viruses such as Influenza and any Coronavirus



Offices

Healthy, clean air for employees during winter. Eliminate airborne viruses and bacteria.



Hotels

Offer guests an allergy free room. The SaphaiAir unit scrubs the air, removing pollen, mold, dust mites and viruses. Cleanroom grade air in just one hour.

Super-clean air in any room within 1 hour

Kills all microbes

Traps and kills 99.95% bacteria, viruses and molds.

Cleanroom grade air within 1 hour

Fully cleans the air in a 200 square foot room approximately 8 times every hour.

Perfect for quiet environments

Traps and kills 99.95% bacteria, viruses and molds.



Simply plug in and turn on

No assembly, no installation, just plug-in and go.

Compact and portable

Powerful and tough yet light, compact and portable.

630mm high, 485mm wide, 200mm deep

Low energy costs

Powered by a 44 watt motor, equivalent to a bulb. Can leave on 24/7.

Hospital Trials: **SAPHAI AIR**  reduces 'Colony Forming Units' by 79% within one hour

Saphai-Medical was formed in 2015 with a view to designing and developing a series of top-rated air purifiers. The management team have spent over 25 years in the global air filtration business and this is reflected in the performance of Saphai-Air technology in efficiently removing pathogens such as Coronavirus, MRSA and SARS.

Need advice? Get in touch.

[Email: sales@saphai-medical.com](mailto:sales@saphai-medical.com)

..... Your local distributor





Anti-viral technology

CONTROL chemical offers high levels of antimicrobial activity (it carries on working and is a persistent solution) and is fragrance free, chlorine free, alcohol free and exhibits the following key qualities when in use, Non-corrosive, Non-irritant, Non-toxic, food safe, safe in use, cost effective and excellent levels of user acceptance with a prolonged antimicrobial effect and excellent material compatibility.

CONTROL is based around the quaternary ammonium compounds didecyldimethyl ammonium chloride (DDAC) and benzalkonium chloride (BAC) with an adjuvant effect to enhance its anti-microbialefficacy.

The advanced technology within the CONTROL product has resulted in the production of a 6th generation quaternary ammonium compound QAC).

CONTROL is a powerful lytic agent which is based on the quaternary ammonium compounds benzalkonium chloride and didecyldimethyl ammonium chloride. These have multiple affects and points of action within the microbe which include:

- Inactivation of energy-producing enzymes
- Denaturation of essential microbial proteins
- Physical disruption of membrane lipids
- Bacteria cell walls



MICROBIAL CLASS	EFFICACY TEST	CONTACT TIME (Mins)	LOG REDUCTION
BACTERIA (gram + / Gram -)	EN 1276	1	> 6
	AOAC—Bactericidal	10	> 6
VIRUSES (enveloped and non enveloped)	EN 14476	5	> 4
	AOAC—Virucidal	5	> 4
FUNGI	EN 1650	1	> 5
	AOAC—Fungicidal	10	> 6
BACTERIAL SPORES	EN 13704	60	> 3
MYCOBACTERIA	EN 14563:2008	5	> 5

ORGANISM LIST

DISINFECTION PERFORMANCE:

Acinetobacter baumannii {(ATCC 19003)}
Acinetobacter lwoffii {(ATCC 9957)}
Acinetobacter lwoffii {(ATCC 15309)}
Bordetella bronchiseptica {(ATCC 10580)}
Chlamydia psittaci {(VR-125)}
Citrobacter freundii {(ATCC 8090)}
Enterobacter agglomerans {(ATCC 27155)}
Enterobacter aerogenes {(ATCC 13048)}
Enterobacter cloacae {(ATCC 13047)}
Escherichia coli {(ATCC 11229)}
Escherichia coli O111:H8 {(ATCC BAA-184)}
Escherichia coli {(Carbapenem Resistant)} {(CDC 81371)}
Escherichia coli {(Extended Spectrum B-Lactamase)} {(ESBL)} {(ATCC BAA-196)}
Escherichia coli {(Tetracycline Resistant)} {(ATCC 47041)}
Enterococcus faecalis {(ATCC 19433)}
Enterococcus hirae {(ATCC 10541)}
Fusobacterium necrophorum {(ATCC 27852)}
Klebsiella oxytoca {(ATCC 13182)}
Klebsiella pneumoniae {(ATCC 13883)}
Klebsiella pneumoniae {(NDM-1 positive)} {(New Delhi metallo-beta-lactamase)} {(CDC 1000527)}
Listeria monocytogenes {(ATCC 19117)}
Micrococcus luteus {(ATCC 14452)}
Micrococcus luteus {(ATCC 4698)}
Pasturella multocida {(ATCC 12947)}
Proteus vulgaris {(ATCC 9920)}
Proteus vulgaris {(ATCC 13315)}
Pseudomonas aeruginosa {(ATCC 15442)}
Pseudomonas aeruginosa {(Tetracycline Resistant)} {(ATCC 27853)}
Pseudomonas cepacia {(ATCC 25416)}
Salmonella enterica {(ATCC 23564)}
Salmonella enterica {(ATCC 10708)}
Salmonella enteritidis {(ATCC 4931)}
Salmonella enterica serotype pullorum {(ATCC 19945)}
Salmonella typhi {(ATCC 6539)}
Salmonella typhimurium {(ATCC 23564)}
Serratia marcescens {(ATCC 9103)}
Serratia marcescens {(ATCC 14756)}
Shigella flexneri {(ATCC 9380)}
Shigella flexneri {(ATCC 12022)}
Shigella sonnei {(ATCC 25931)}
Staphylococcus aureus {(ATCC 6538)}
Staphylococcus aureus {(ATCC 25923)}
Staphylococcus aureus {(sub species aureus)} {(ATCC 33586)}
Staphylococcus aureus {(ATCC 14154)}
Staphylococcus aureus {(Community Associated Methicillin Resistant)} {(CA-MRSA)} {(Genotype USA 300)}
Staphylococcus aureus {(Community Associated Methicillin Resistant)} {(CA-MRSA)} {(Genotype USA 400)}
Staphylococcus aureus {(Methicillin Resistant)} {(MRSA)} {(ATCC 33592)}
Staphylococcus epidermidis {(ATCC 14990)}
Staphylococcus epidermidis {(Antibiotic resistant)} {(ATCC 51625)}
Streptococcus agalactiae {(ATCC 13813)}
Staphylococcus haemolyticus {(ATCC 29970)}

Streptococcus pneumoniae {(Penicillin Resistant)} {(ATCC 51915)}
Streptococcus pyogenes {(ATCC 19615)}
Streptococcus mutans {(ATCC 25175)}
Enterococcus faecalis {(Vancomycin Resistant)} {(VRE)} {(ATCC 51299)}
Staphylococcus aureus {(Vancomycin Intermediate Resistant)} {(VISA)} {(HIP 5836)}
Vibrio cholera {(ATCC 11623)}
Yersinia enterocolitica {(ATCC 23715)}

VIRUCIDAL* PERFORMANCE:

Avian Influenza A {(H5N1)} Virus
Avian Influenza A {(H3N2)} Virus {(Avian Reassortant)} {(VR-2072)}
Cytomegalovirus {(VR-538)}
Coronavirus {(SARS-associated)}
Hantavirus
Hepatitis B Virus {(HBV)}
Hepatitis C Virus {(HCV)}
Herpes Simplex Virus Type 1 {(VR-733)}
Herpes Simplex Virus Type 2 {(VR-734)}
Human Coronavirus {(VR-740)}
Human Immunodeficiency Virus Type 1 {(HIV 1)} {(AIDS Virus)}
Influenza A {(H1N1)} Virus {(VR-1469)} {(Strain A/PR/8/34)}
Influenza A Virus {(H3N2)} {(Hong Kong Strain)} {(VR-544)}
Respiratory Syncytial Virus {(VR-26)}
Vaccinia Virus {(VR-119)}

ANIMAL PREMISE VIRUCIDAL* PERFORMANCE:

Avian Infectious Bronchitis Virus {(Strain Beaudette IB42)}
Avian Influenza A Virus {(H5N1)}
Avian Influenza A Virus {(H3N2)} {(Avian Reassortant)} {(VR-2072)}
Canine Coronavirus {(VR-809)}
Canine Distemper Virus {(VR-128)}
Feline Picornavirus {(VR-649)}
Infectious Bovine Rhinotracheitis Virus {(VR-188)}
Pseudorabies Virus {(VR-135)}
Swine Influenza A Virus {(H1N1)} {(Strain A/Swine/Iowa/15/30)} {(VR-333)}
Transmissible Gastroenteritis Virus {(TGE)} {(Clinical Isolate)}
This product kills the following viruses in 10 minutes at 2 oz. per gal. of water and 5% soil on hard, non-porous surfaces:
Canine Parvovirus** {(CPV)} {(VR-2017)}
Mice** {(Parvovirus)} {(VR-1346)} (Not for use in CA.)
Rabies**
Porcine Parvovirus** {(VR-742)}

** Indicates that a dilution is required for this claim.

NON-FOOD CONTACT SANITIZING PERFORMANCE:

Klebsiella pneumoniae {(ATCC 4352)}
Staphylococcus aureus {(ATCC 6538)}

FUNGICIDAL PERFORMANCE:

Trichophyton mentagrophytes {(ATCC 9533)} {(Athlete's foot fungus)} {(a cause of Ringworm)}

MILDEWSTATIC PERFORMANCE

Aspergillus niger {(ATCC 16404)}



HEPA Filter Technology

Each SaphaiAir purifier has two HEPA filters incorporating the very latest in fine-fibre technology from our German component supplier. The filters are produced by Irema- Filter GmbH using their unique Integrated Nanofibre Technology which creates a 3-dimensional web of fibres, arranged in a vertical format.



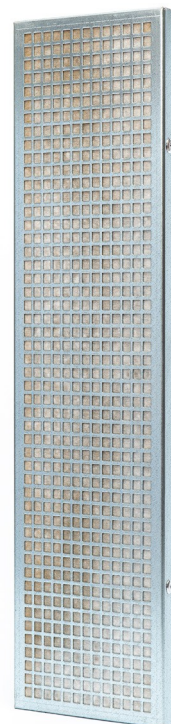
The fibres are 100% polypropylene which has several advantages over traditional microglass paper HEPA filters. It is hydrophobic so will not absorb water and is microbially inert. The fibres are endless which means there is no fibre shedding during operation. By taking micro and very fine fibers (in diameters less than 1 μm) our media can capture fine and very fine particles when air is filtered. This way we are able to achieve very high mechanical efficiencies and high removal rates of PM2.5 particulate matter.

As an option, any SaphaiAir purifier can also be fitted with a gas removal filter. The goal of chemical filter media is to eliminate harmful gases such as H_2S , SO_2 , SO_3 , O_3 and mercaptans in the air.

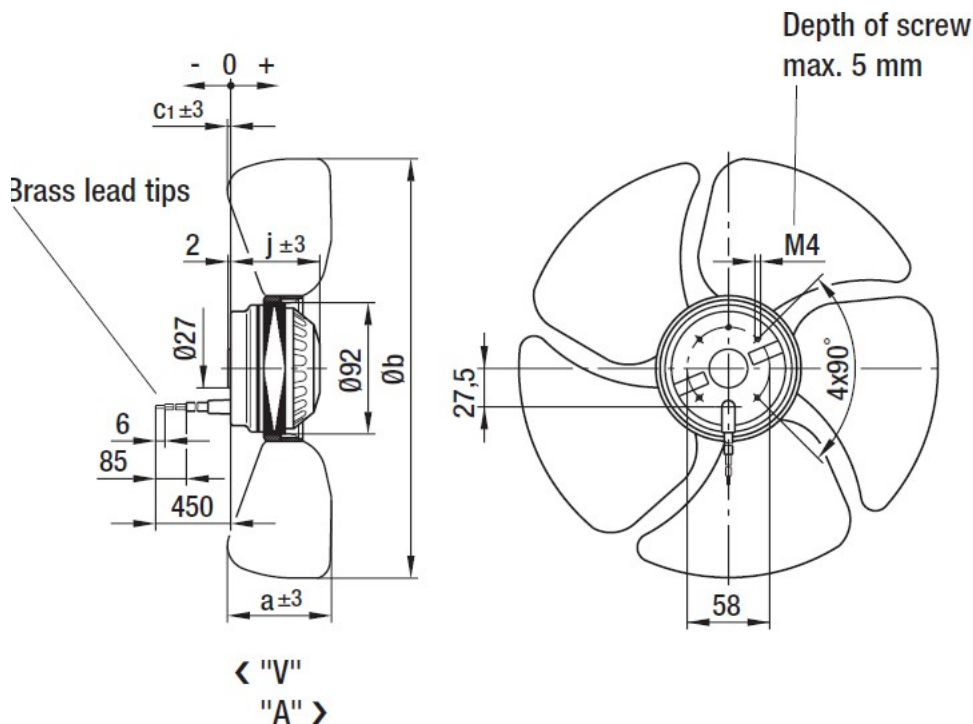
The chemical filter media has a porous structure that can be impregnated with, potassium permanganate (KMnO_4) or Sodium Permanganate; this is what gives the pellet its specific purple colour. Potassium and Sodium permanganate are a very powerful oxidator.

Harmful gases penetrate into the pellet through the microporous surface after which an irreversible oxidation process takes place. Harmful gases are converted into a neutral residual gas.

This purple medium reacts with a very extensive range of gases. The best solution for your situation can be determined based on the application, the types of gases to be captured, the gas concentration and the quantity of air. The CFA-A4 will eliminate a broad range of gases with a very high efficiency of more than 99,9%



German Fan Technology



EBM-Papst's axial fans prove their reputation as space-saving wonders by moving air for hot or cold air exchange in a wide variety of devices and systems. The outstanding features of axial fans are their small installation depth, low noise level and exceptional efficiency, and are particularly well suited for air flow through air purifiers. Furthermore, with GreenTech EC technology, the axial fan becomes an intelligent energy saver for an extremely wide range of applications.

The further advantages are:

- Wide selection of models, dimensions and air performance levels
- Optimum efficiency and noise level due to well-engineered aerodynamic design of the fan blades
- High-efficiency, energy saving designs in GreenTech EC technology with standardised integration of control functions and sensor signals
- Wide range of accessories, including guard grilles, basket guard grilles and wall rings

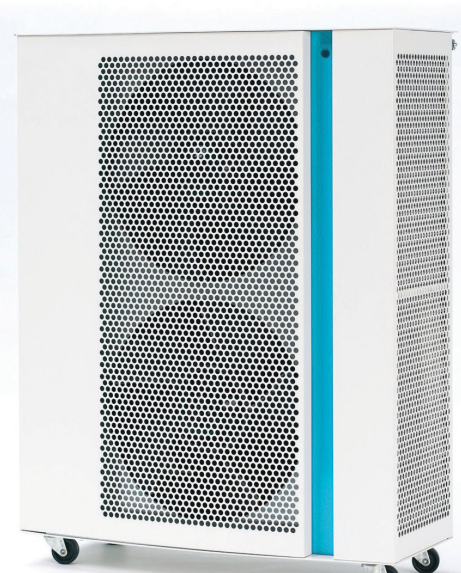
The axial fan is dynamically balanced in two planes to DIN ISO 1940

Fan Technology

Nominal data

Type	A4E250-AE32-05			
Motor	M4E068-BF			
Phase		1~	1~	1~
Nominal voltage	[V]	230	230	230
Frequency	[Hz]	50	60	60
Type of data definition		rfa	ml	rfa
Valid for approval / standard		CE	CE	UL
Speed	[min ⁻¹]	1350	1500	1500
Power input	[W]	41	50	55
Current draw	[A]	0.18	0.23	0.25
Motor capacitor	[μF]	1.5	1.5	1.5
Capacitor voltage	[VDB]	400	400	400
Max. back pressure	[Pa]	60	60	60
Max. ambient temperature	[°C]	55	55	55

ml = max. load · me = max. efficiency · rfa = running at free air · cs = customer specs · cu = customer unit
Subject to alterations



Charts: Air flow 50 Hz

