DAIKIN

Perfecting the Air

STREAMER

STREAMER ON for Pure Air Performance

MCK55TVM6

MC40UVM6
MCK55UVM6

MC30YVM7

STREAMER TECHNOLOGY

LONG LIFE FILTER

3D Powerful 3-Directional Suction For Faster Air Purification

PROTECT YOUR LOVED ONES from harmful indoor air

Perfecting Indoor Environmental Quality

with superior filtration technologies, for healthier indoor air quality and safer environments for all.

CONTENTS

3 Steps to decompose harmful substances

3D
Powerful
3-Directional
Suction For Faster
Air Purification

Powerful Suction

Takes in dust over a wide area from 3 directions.

LONG LIFE FILTER

Effective Capture Of Pollutants

Catches dust and pollutants effectively with an electrostatic HEPA filter. 10 years life span for Electrostatic HEPA filter

STREAMER TECHNOLOGY

Decomposition

Uses Daikin's Streamer technology to decompose harmful substances caught on the filter by oxidation.*1

Effect after nine hours in a space of about 200L. No maintenance or no replacement is required for Deodorizing filter

STREAMER

Note:
*1 Placed an air purifier in a 1 m^3 box with acetaldehyde as an exhaust gas-derived VOC and operated the air purifier. Test result: Confirmed an increase in concentration of generated product (CO_2) when acetaldehyde was decomposed by Streamer. (Evaluation by Daikin)
Test unit: MCK55S (Japanese model), a model equivalent to MCK55T series.

STREAMER TECHNOLOGY

Cleaner Air for a Healthier Life

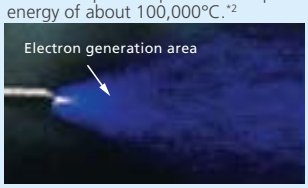
The indoor air purification system of Daikin's Streamer Technology improve the quality of the air for sterile environment effectively.

Daikin's Streamer Technology

Inside

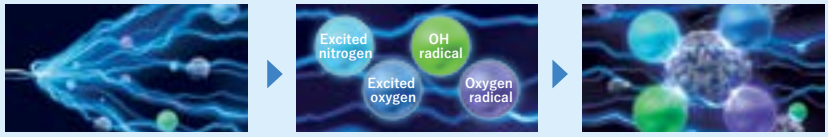
Streamer decomposes by suction

Streamer, a type of plasma discharge, decomposes hazardous chemical substances.
The decomposition power is comparable to thermal energy of about 100,000°C.*2



Note:
*2 Comparison of oxidation decomposition. This does not mean temperature will become high.

Mechanism of decomposition by Streamer



Streamer emits high-speed electrons.

The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of decomposing elements with decomposition power.

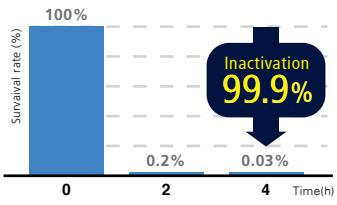
The decomposing elements provide decomposition power.

99.9% in activation of the Omicron variant of Coronavirus (SARS-CoV-2) within 2 hours

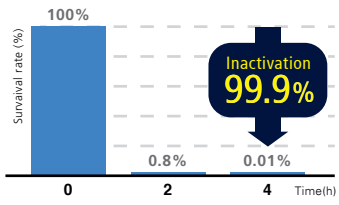
Demonstration of the inactivation effects against 6 types of Coronavirus variants by Streamer technology.

*Each survival rate is calculated by comparison with the rate of natural attenuation of each hour.

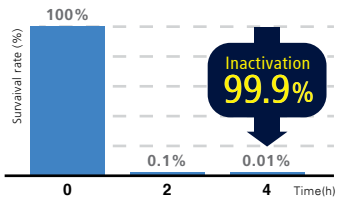
Conventional



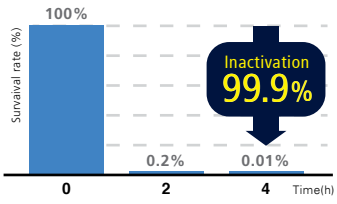
Alpha



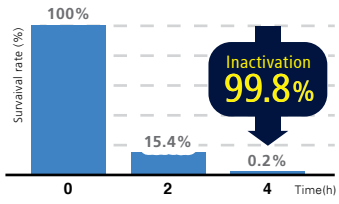
Beta



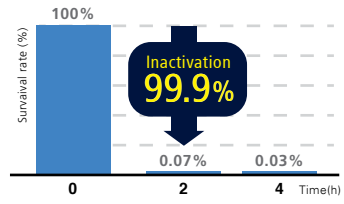
Gamma



Delta



Omicron



Test Organization

Conventional strain: Faculty of Veterinary Medicine, Okayama University of Science
Alpha, Beta, Gamma, Delta, and Omicron strain: Research Institute for Microbial Diseases, Osaka University

Test Method

Quantification was performed by the TCID50 method using an acrylic box of about 31L. The virus loads were quantified using Vero E6 / TMPRSS2 cells.
*This result was obtained by using a Streamer discharge device for testing in lab conditions.
The effect of products equipped with Streamer technology or results in actual use environments may differ.

Scan here for more
DAIKIN Streamer Research Institute

The Three C's of Steamer

STREAMER TECHNOLOGY

THE STREAMER SYMBOL CONSISTS OF THREE C'S

1 Clash

Decomposes harmful substances on dust collection filter by oxidation

2 Cycle

The deodorizing filter absorbs and decompose odour

3 Clean

Remove bacteria from dust collection filter

STREAMER

Unique vertical structure

Arranged vertically

Humidifying filter
(MCK55 model only)
Double-layer filter for humidification
No need to change for 10 seasons

Deodorising filter
Absorbs odour
No replacement is required

Pre-filter
Catches large particles of dust
No replacement is required

Active plasma ion generation unit
(MCK55 and MC55 models only.)
No replacement is required

Dust collection filter (Electrostatic HEPA filter)
Catches fine particles of dust
10 years life span (In operation)

Streamer unit
No replacement is required

It may become necessary to change out items that usually do not require replacing due to environmental and operational conditions.

About the dust collection and deodorising capacity of air purifiers:
- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

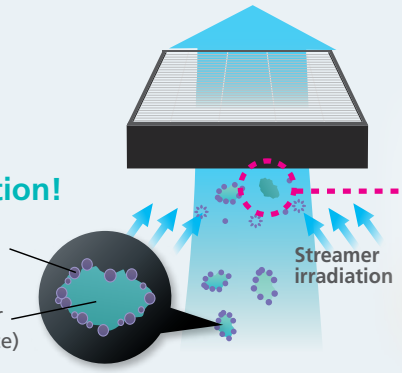
This product is not a medical device, medical treatment device or a therapeutic good.
This product is not intended to have any therapeutic use or to be used for the diagnosis, treatment, relief or prevention of illness.
If you have a health concern or are not feeling well, please consult a health care professional.

STREAMER TECHNOLOGY

1 Clash

Decomposes harmful substances on the dust collection filter by oxidation!

Harmful gaseous chemical substances attach to the surface of floating substances in the air.

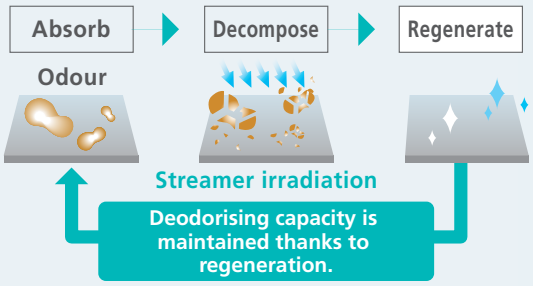


The dust collection filter catches the floating substances with the attached harmful gases and Streamer decomposes the harmful gases by oxidation. *1

2 Cycle

The deodorising filter absorbs and decomposes odour.

The deodorising capacity is maintained because the adsorbing capacity regenerates.
(Comparison with conventional Daikin products. Evaluation under conditions set by Daikin).*2



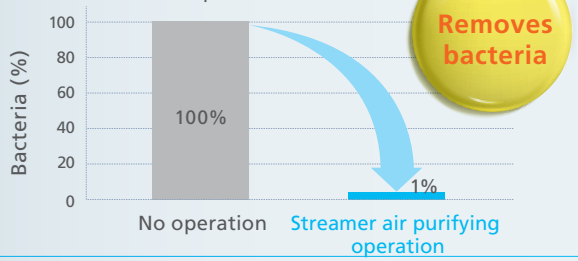
No need to change deodorising filters

3 Clean

Removes bacteria from dust collection filter *3, humidifying filter *4, and humidifying water.*5

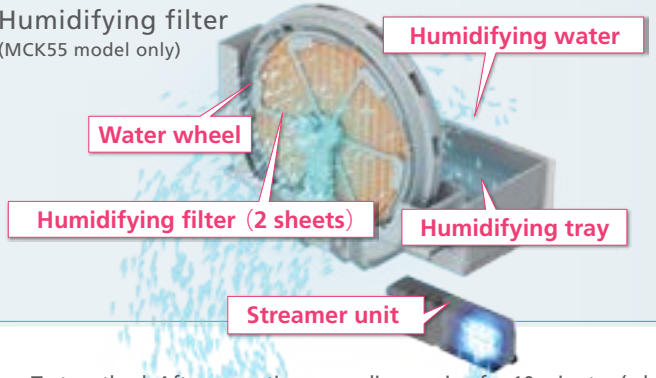
• Dust collection filter

•Bacteria reduction performance



Removes bacteria

• Humidifying filter
(MCK55 model only)



Note:

*1 (Reduction of gases) Testing organization: Life Science Research Laboratory. Test method: After operating a gasoline engine for 10 minutes (when particulate concentration reached 60mg/m³), operated the air purifier for 80 minutes to absorb polluting dust emitted from the engine. Operated this air purifier for 24 hours in a closed space of 200L and measured the effect to decompose gases. Test result: Compared with a test without Streamer irradiation, gas components were reduced by 63% in 9 hours. Test number: LSRL-83023-702. Test unit: Tested with MCK70N (Japanese model).

*2 Placed the air purifier and an odour component, acetaldehyde, in a box of 21 m³ and operated the air purifier. Examined increase of concentration of product (CO_2) generated by decomposition of acetaldehyde by Streamer (evaluation by Daikin).
Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series.

*3 Testing organization: Japan Food Research Laboratories. Test number: 15044988001-0201. Test method: Attached a test piece inoculated with bacteria liquid on the upstream side of a dust collection filter installed in an air purifier, and operated it in a test area of 25 m³. Counted the number of live bacteria after five hours. Test object: A type of bacterium. Object part: Dust collection filter. Test result: Reduced by more than 99% in five hours. Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series (turbo operation).

*4 (Removal of bacteria from humidifying filter) Works on objects caught by the humidifying filter. Testing organization: Japan Food Research Laboratories. Test number: 15044989001-0101
Test method: Attached a test piece inoculated with bacteria liquid on the upstream side of a humidifying filter installed in an air purifier, and operated it in a test area of 25 m³. Counted the number of live bacteria after five hours. Object part: Humidifying filter. Test result: Reduced by more than 99% in five hours. Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series (turbo operation).

*5 (Reduction of bacteria in humidifying tray) Testing organization: Japan Food Research Laboratories. Test number: 15044985004-0101.
Test method: Performance evaluation test by voluntary standard of Japan Electrical Manufacturers' Association (HD-133). Test object: Moulds and bacteria in humidifying water. Test result: Reduced by more than 99% in 24 hours. Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series (turbo operation).

This product can be used to improve the quality of the air by removing airborne hazardous chemical substances, allergens, mould, bacteria, and viruses, etc. However, this product is not intended for the creation of sterile environments or for the prevention pathogen infections.

This description relates to the Streamer Technology devised by Daikin, but not to this Air Purifier. Test results from use of the Streamer Technology are generated according to prescribed test methods conducted by Daikin. Although the Streamer Technology is contained within this Air Purifier, this does not mean that precisely the same results will be experienced using this Air Purifier. Actual results may differ depending on the conditions of product installation and use of the actual product, etc.

Daikin's Unique Double Method

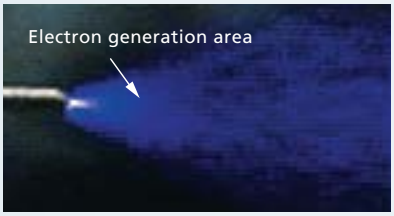
STREAMER TECHNOLOGY

Inside

Streamer decomposes by suction

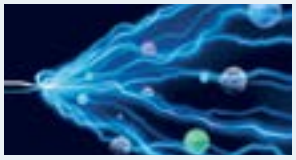
Streamer, a type of plasma discharge, decomposes hazardous chemical substances.

The decomposition power is comparable to thermal energy of about 100,000°C.*2

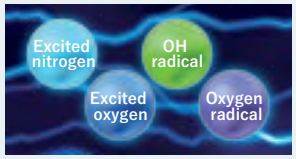


Note:
*2 Comparison of oxidation decomposition. This does not mean temperature will become high.

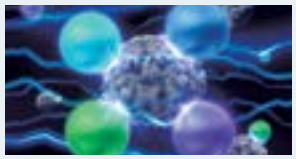
Mechanism of decomposition by Streamer



Streamer emits high-speed electrons.



The electrons collide and combine with nitrogen and oxygen in the air to form four kinds of decomposing elements with decomposition power.



The decomposing elements provide decomposition power.

Outside

Active Plasma ION

Active plasma ion flow out

*MCK55 and MC55 models only.

The plasma ion technology uses plasma discharge to release ions into the air, which combine with components of the air to form active species with strong oxidizing power like OH radical. They attach to the surface of fungi and allergens and decompose proteins in the air by oxidation.

Daikin's plasma ions have been proved safe.
Safety concerning effect on skin, eyes, and respiratory organs
Testing organization: Life Science Laboratories, Ltd.
Name of test: repeated-dose toxicity test
Test number: 12-II A2-0401

Mechanism of reduction by active plasma ions

Concentration: 25,000 ions/cm^3 *1

Note:
*1 The number of ions per 1cm^3 of air blown into the atmosphere measured near the air outlet during operation with maximum airflow. Test conditions: temperature 25°C, humidity 50%.

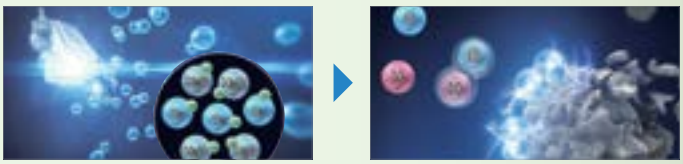
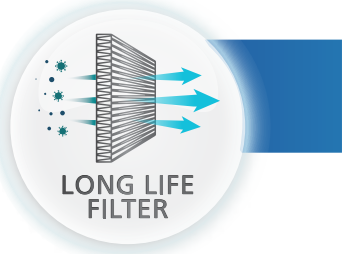


Image is for illustrative purposes

Electrostatic HEPA Filter



FEATURES HIGH-PERFORMANCE FILTER TO CATCH FINE PARTICLES OF DUST

Removes 99.97% of fine particles of 0.3μm *1

Note:
*1This is removal performance of filter and not removal performance for entire room.

The filter collects dust efficiently with electrostatic forces.
It is not prone to clogging compared with unelectrified HEPA filters which collect particles only by the fineness of the mesh.

▶

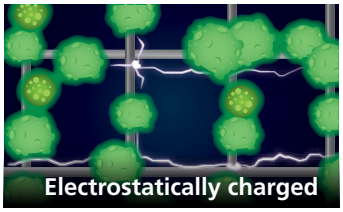
Therefore, a larger amount of air can pass through the filter.

▶

The filter can purify a larger amount of air!

Comparison between Electrostatic HEPA Filter and Non-electrostatic Filter

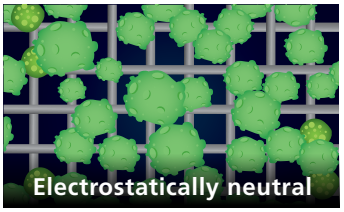
Electrostatic HEPA Filter



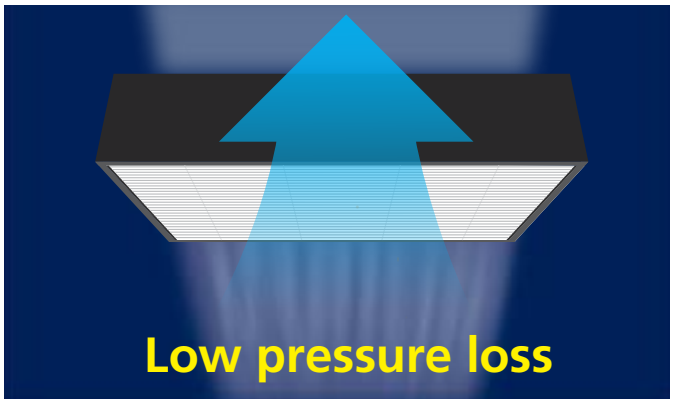
Filter fiber itself is charged with static electricity, and collects particles efficiently.

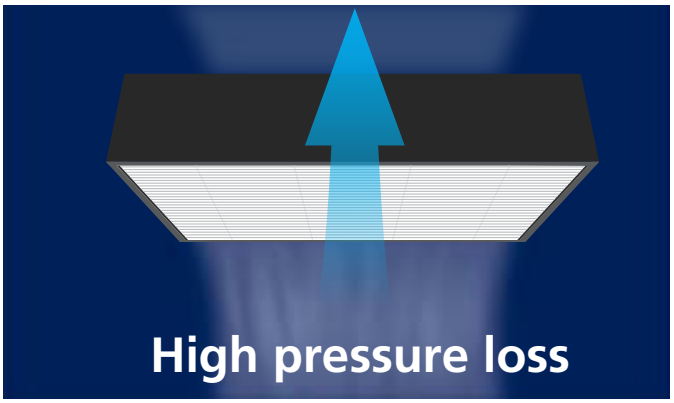
Doesn't clog easily because of low pressure loss.

Non-Electrostatic Filter



Because it catches particles relying only on mesh size, it is necessary to make mesh finer, making it easy to be clogged.





About the dust collection and deodorising capacity of air purifiers:
- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

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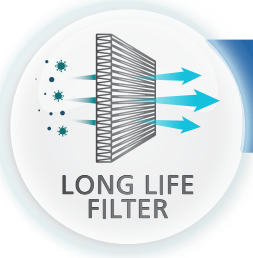
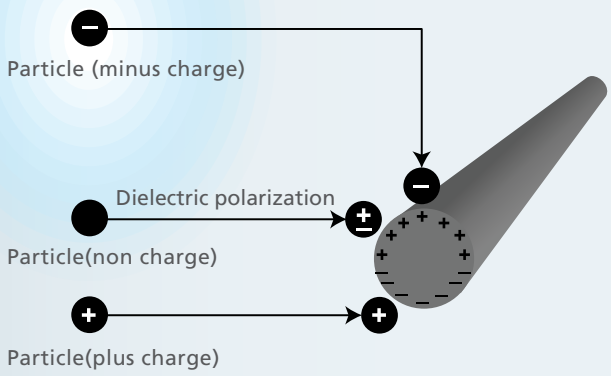
Long life filters

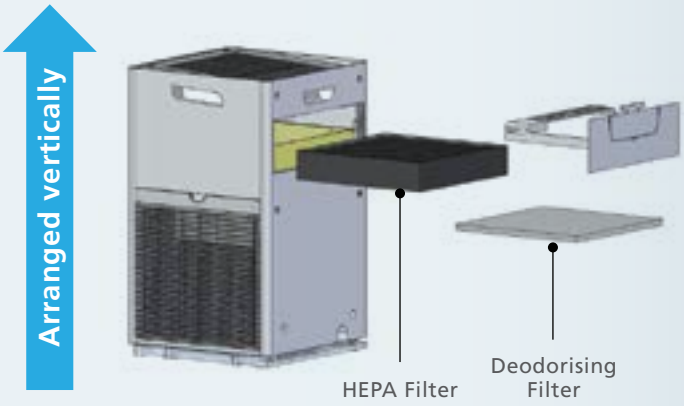


- **No replacement** is required and 10 years life for Electrostatic HEPA filter
- Having genuine HEPA and deodorizing filter lifetime cost to provide more **cost advantage** to the end user
- 3-stage filtration system of pre-filter, deodorising filter and dust collection filter (Electrostatic HEPA filter) ensures thorough and rapid purification

Because of maintaining electrostatic on microfiber, dust in the air can be collected effectively, realising high dust collection efficiency is possible.

Mechanism of particulate collect by electret fiber



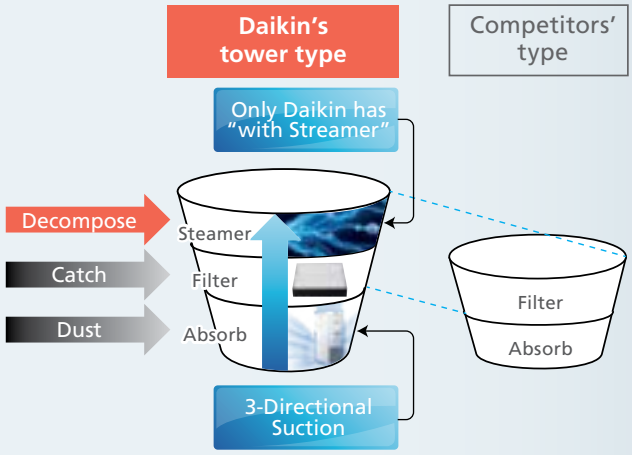


FILTER & STREAMER COMBINATION
Electrostatic HEPA method × Streamer

Catch dust certainly with above electrostatic HEPA filter, and decompose collected harmful substances with Streamer

Because Streamer decompose…

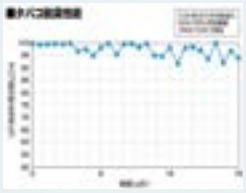
Clean inside of Air purifier → Pollutants do not scatter again → **Cleaner air is discharged.**



DEODORISING

High deodorizing performance → **Keep the performance decomposing odor by streamer**

Decompose Odor source → Keep the performance → No need of the maintenance for the filter



Pollutants that can be collected and deodorised by filter

House dust	Cat epidermis (dander)	PM2.5	Wheat flour
City exhaust gas (trichloroethylene,etc.)	Garbage odour	Moulds	Pet odour
Dog epidermis (dander)	Yellow dust	Pet hair	Diesel exhaust particulates (DEP)
Ammonia	VOC-type chemical substances	Cigarette smoke odour	House dust mites (droppings and dead mites)
Pollen (cedar,etc.)	Hamster epidermis (dander)	Indoor air pollutants (formaldehyde, etc.)	Body odour
NOx	Cooking odour	Cockroaches (droppings)	Mould odour

Pollutants that can be reduced

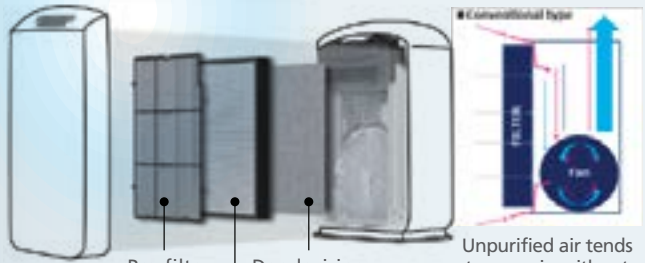
Floating viruses · Attached viruses · Attached odour · Floating mould · Attached bacteria

Powerful Suction and Reduced Operation Sound

3D
Powerful
3-Directional
Suction For Faster
Air Purification

COMPACT, EFFECTIVE AND QUIET THANKS TO THE NEW, INNOVATIVE STRUCTURE

Common design

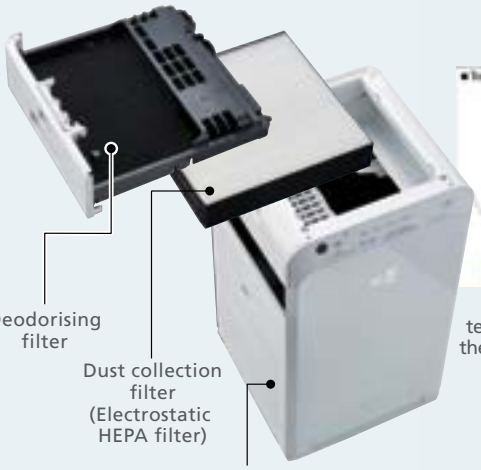


Unpurified air tends to come in without getting through the filter and be given out.

Arranged horizontally

MC55 / 40 models

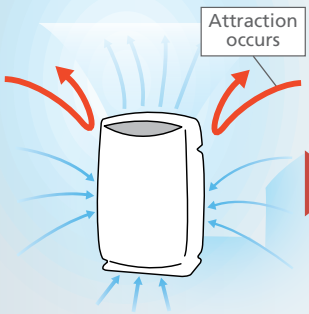
Arranged vertically



Most of all air tend to get through the filter and purified air is given out.

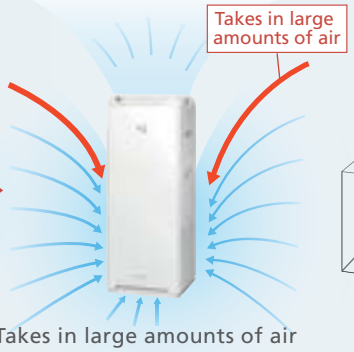
POWERFUL SUCTION IN 3 DIRECTIONS
Effectively takes in dust over a wide area

Common design

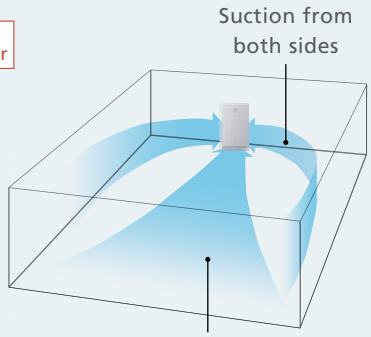


Air above the air inlet is attracted into the faster airflow from the air outlet.

MCK55 model



Takes in large amounts of air because the air inlet is located apart from the air outlet and the airflow from the outlet is soft.



The inlet at the bottom of the front panel collects harmful substances from near the floor

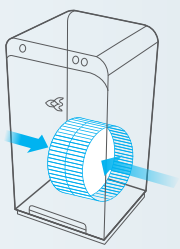
OPERATION SOUND SENSED BY PEOPLE IS REDUCED
(Comparison with conventional Daikin products. In turbo operation)

The key is the sound of airflow from the air outlet

Daikin succeeded in reducing the operation sound sensed by people by adopting a wide air outlet and positioning the fan below the filters for soundproofing effect.

The fan is positioned below

Positioned farthest from people's ears. The filters also provide a soundproofing effect, so the operation sound is not disturbing.

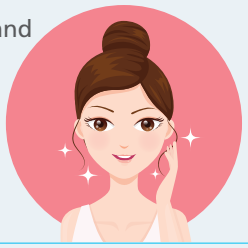


Powerful Humidification to protect against Air Dryness & Viruses (Suitable for bedroom)

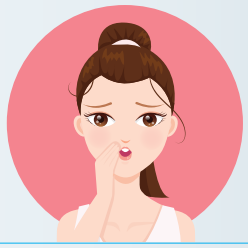
Applicable on MCK55TVM6 Model only

BENEFIT OF HUMIDIFICATION

Protects the skin, the throat and the nostril from dryness.

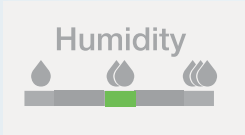


Protects against viruses by maintaining appropriate humidity of the room.



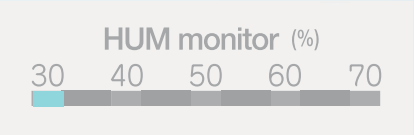
SELECT THE TARGET HUMIDITY FROM 3 LEVELS

(The target humidity is a rough estimation.)



Low 40% Standard 50% High 60%

INDICATES HUMIDITY OF THE ROOM



ELIMINATES BACTERIA ON THE HUMIDIFYING FILTER *1

Effect after five hours in a test space of about 25 m³.
This is an effect in a test space and not a test result in an actual operation space.

STREAMER

REDUCES BACTERIA IN HUMIDIFYING WATER BY STREAMER *2

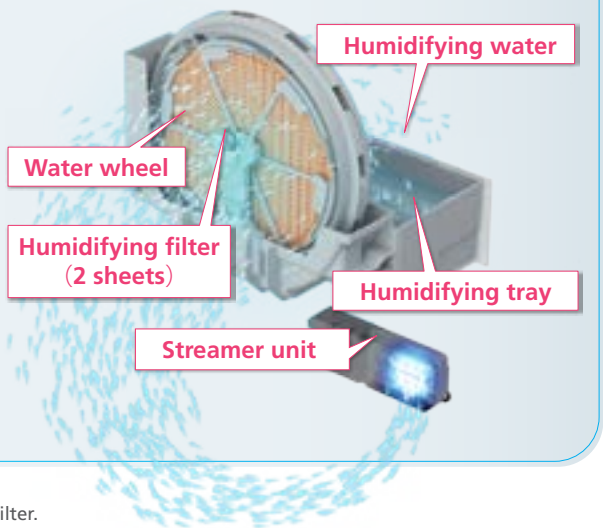
The humidifying tray needs regular maintenance (once in about a week).
This is not a verification result in an actual operation environment.

The humidifying tray is irradiated with Streamer as well as the humidifying filter to reduce bacteria in the water.
By keeping the water and its surroundings clean, the air purifier provides clean air and humidity to the room.

Use tap water to fill the tank, and replace with fresh water every day.
Using well water or water from water purifiers makes bacteria develop faster.

Features for clean humidification

- The humidifying tray is equipped with a silver ion agent
- A water wheel system to keep the humidifying filter from being directly soaked in water



Note:
*1 (Removal of bacteria from humidifying filter) Works on objects caught by the humidifying filter.
Testing organization: Japan Food Research Laboratories.
Test number: 15044989001-0101.
Test method: Attached a test piece inoculated with bacteria liquid on the upstream side of a humidifying filter installed in an air purifier, and operated it in a test space of 25 m³. Counted the number of live bacteria after five hours.
Object part: Humidifying filter.
Test result: Reduced by more than 99% in five hours.
Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series (turbo operation).

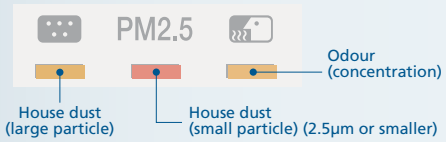
*2 (Reduction of bacteria in humidifying tray) Testing organization: Japan Food Research Laboratories.
Test number: 15044985004-0101.
Test method: Performance evaluation test by voluntary standard of Japan Electrical Manufacturers' Association (HD-133).
Test object: Moulds and bacteria in humidifying water.
Test result: Reduced by more than 99% in 24 hours.
Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series (turbo operation).

Convenience

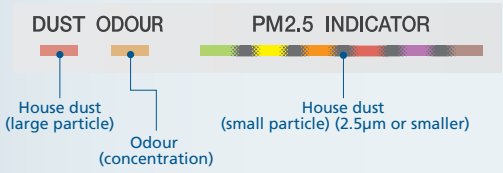
"TRIPLE DETECTION" SENSOR TO QUICKLY DETECT PM2.5

Equipped with a high sensitivity dust sensor that distinguishes small particles such as PM2.5 and larger particles of dust and reacts accordingly. Along with the odour sensor, "triple detection" of dust, PM2.5 and odour is provided.

(MCK55 model)



(MC55 / 40 models)



An air purifier to remove PM2.5

Removes 99% of particles between 0.1μm and 2.5μm*1 in size

Entry of new particles from outdoors, for example by ventilation, is not considered.

"PM2.5" refers to general fine particulate matters sized 2.5μm or smaller. This air purifier has not been proved to remove very fine particles of less than 0.1μm.
This product does not remove all harmful substances in the air.
The test results are effects in a closed space of 32m³ and not in an actual operation space.
Test unit: Tested with MCK55S (Japanese model), a model equivalent to MCK55T series.

Note:
*1 Test method: Japan Electrical Manufacturers' Association Standard JEM1467.
Criterion: Remove 99% of fine particulate matters of 0.1 to 2.5μm in a closed space of 32m³ within 90 minutes.
(Converted to a value in a test space of 32m³)

CHOOSE FROM THE VARIOUS OPERATION MODES

- **Auto Fan mode**
- **Econo mode**
  for energy saving **(MCK55 model)**

- **Anti-pollen mode**
- **Moist mode (MCK55 model only)**
  Humidity is automatically adjusted to be gentle on the skin and throat.

(MC55 / 40 models)

OTHER USEFUL FEATURES

Filter cleaning without opening the panel

Just vacuum with a cleaner.
No need to open the panel to clean the filter.

Equipped with a remote controller

Convenient for operation from a distant position.

MCK55 model

MC55 model

Easy-to-detach water tank (MCK55 model only)

The water tank is conveniently placed in a high position for easy detaching.
The compact size of the tank makes it easy to replenish water in a sink or a wash basin.

Equipped with roll-away casters (MCK55 model only)

Easy to move to clean the floor.

Placement Recommendation

POINTERS FOR GOOD PLACEMENT

- ✔ Choose a position from where airflow can reach all areas of the room.
- ✔ Place on a stable surface. If the unit is placed on an unstable surface, vibrations from the unit may be amplified.
- ✔ If you find that interference from the power circuit inside the unit or cables causes interference on your TV screen or static noise to be emitted from nearby radios or stereos, move the unit to at least 2m away from the device. Keep cordless phones and radio-controlled clocks away from the unit also.

TIPS

- To avoid staining of walls, position the unit in accordance with the positioning measurements in the illustration. However, note that since this unit draws in dirty air, certain types of wall may be stained even if the measurements are adhered to. In such cases, make sure to maintain sufficient distance between the unit and the wall.
- When used for a long period of time in the same location, the floor and surrounding walls may get stained as air is frawn into air inlets near the base of the unit. It is recommended to clean the unit peroidically.

Specifications

MODEL			Standard Air Purifier 30 type			Streamer Air Purifier 40 type			
									
			MC30YVM7			MC40UVM6			
Colour			White						
Colour of air outlet			—			—			
Mode			Air purifying operation						
Applicable room area*1	Air purification	m²	23 (13.2m² purified in approx. 19 minutes)			31 (13.2m² purified in approx. 15 min.)			
	Air purification + Humidification	m²	———						
Power supply			1 Phase, 220–240/220–230V, 50/60Hz						
Plug shape			C type						
Mode			Quiet	Standard	Turbo	Quiet	Low	Standard	Turbo
Airflow rate		m³/min.	1.0	2.0	3.0	1.1	1.8	2.8	4.0
Power consumption		W	8	15	25	7	9	13	23
Sound pressure level		dB	19	27	37	19	27	36	49
Humidification*2		mL/h	———						
Dimensions		mm	H450 X W270 X D270			H500 × W270 × D270			
Weight		kg	5.8			6.8			
Dust collection filter			Electrostatic HEPA filter						
Humidifying method			—						
Tank capacity			—						
Optional accessories	Replacement filter	Dust collection	BAFP500A (1 sheet) (Purchase of new filters is needed after about 10 years)*2			KAFP080B4E (1 sheet) (Purchase of new filters is needed after about 10 years)*3			
		Deodorising	No replacement is required - Lifetime operation						
		Humidifying	----------						

Note: *1 Calculation based on testing method of the Japan Electrical Manufacturers ,Association standard JEM1467.
*2 Verified by test method based on Japan Electrical Manufacturers' Association Standard JEM1467.
The standard assumes five or more cigarettes are smoked per day.
Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
More frequent filter exchange may be needed depending on operating conditions

About the dust collection and deodorising capacity of air purifiers:
- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

This product is not a medical device, medical treatment device or a therapeutic good.
This product is not intended to have any therapeutic use or to be used for the diagnosis, treatment, relief or prevention of illness.
If you have a health concern or are not feeling well, please consult a health care professional.

MODEL				Streamer Air Purifier 55 type				Streamer Air Purifier Humidifying 55 type							
				  Withwireless remote controller MC55UVM6				  With wireless remote controller MCK55TVM6							
Colour				White											
Mode				Air purifying operation				Air purifying operation				Humidifying operation			
Applicable room area*1	Air purification	m²		41 (13.2m² purified in approx. 11 min.)				41 (13.2m² purified in approx. 11 min.)				———			
	Air purification + Humidification			———				41				Prefab : 23 Wooden : 14			
Power supply				1 Phase, 220–240/220–230V, 50/60Hz											
Plug shape				C type											
Mode				Quiet	Low	Standard	Turbo	Quiet	Low	Standard	Turbo	Quiet	Low	Standard	Turbo
Airflow rate		m³/min.		1.1	2.0	3.2	5.5	0.9	2.0	3.2	5.5	1.7	2.4	3.2	5.5
Power consumption		W		8	10	15	37	7	10	17	56	11	14	19	58
Sound pressure level		dB		19	29	39	53	19	29	39	53	25	33	39	53
Humidification*2		mL/h		—	—	—	—	—	—	—	—	200	240	300	500
Dimensions		mm		H500 × W270 × D270				H700(718 with caster) × W270 × D270							
Weight		kg		6.8				9.5 (Without water)							
Dust collection filter				Electrostatic HEPA filter											
Humidifying method				———				Evaporation type Element							
Tank capacity				———				About 2.7L							
Optional accessories	Replacement filter	Dust collection		KAFP080B4E (1 sheet) (Purchase of new filters is needed after about 10 years)*3											
		Deodorising		No replacement is required - Lifetime operation											
		Humidifying		———				KNME080A4E							

Note:

*1 Calculation based on testing method of the Japan Electrical Manufacturers ,Association standard JEM1467.

*2 Humidification amount changes in accordance with indoor and outdoor temperature and humidity.
Measurement condition: 20°C in temperature, 30% in humidity.(JEM1426)

*3 Verified by test method based on Japan Electrical Manufacturers' Association Standard JEM1467.
The standard assumes five or more cigarettes are smoked per day.
Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
More frequent filter changing may be needed depending on operating conditions.

Functions




		MC30YVM7	MC40UVM6	MC55UVM6	MCK55TVM6
	Humidification				●
1	Temperature and humidity sensors				●
2	Dust (PM2.5/dust) and odour sensor lamps		●	●	●
4	Streamer discharge	●	●	●	●
5	Active plasma ion			●	●
6	Electrostatic HEPA filter		●		●
7	Deodorising filter	●	●	●	●
8	Moist mode				●
9	Econo mode		●	●	●
10	Auto fan mode		●	●	●
11	Anti-pollen mode		●	●	●
12	Turbo mode		●		●
13	Child proof lock			●	●
14	Brightness adjustment		●	●	●
15	Auto-restart after power failure	●	●	●	●
16	Stabilizer free	●	●	●	●

1 Temperature and humidity sensors
Humidity is detected and shown by an easy-to-understand indicator.

2 Dust (PM2.5/dust) and odour sensor lamps
"Triple detection" is performed by a dust sensor (which distinguishes small particles, such as PM2.5 and larger particles of dust, and reacts accordingly) and an odour sensor.

3 Dust (PM2.5/dust) sensor lamps
A dust sensor detects house dust and PM2.5 ultrafine particles approx. 2.5μm and smaller, and the lamps indicate air quality.

4 Streamer Discharge
This function quickly decomposes odours and allergens, etc., with high speed electrons that have a powerful ability to oxidize.

5 Active plasma ion
The active plasma ion technology decomposes odours and allergens in the air by plasma ions with strong oxidizing power.

6 Electrostatic HEPA filter
There is a high-performance filter that catches 99.97% of 0.3μm fine particles.

7 Deodorising filter
Odours and adjuvants are caught on the catalyst and decomposed by the power of Streamer.

8 Moist mode
Automatic control maintains relatively high humidity that is gentle to the throat and the skin.

9 Econo mode
Operation automatically switches only between "Quiet" and "Low" modes in accordance with the degree of polluted air.

10 Auto fan mode
The air purifier is run, without wasteful operation, only in accordance with the level of pollutants in the air, which is detected by the sensor.

11 Anti-Pollen Mode
Switching between "standard" and "low" modes to create a gentle turbulence, pollen is caught before it lands on the floor.

12 Turbo mode
This convenient mode provides high-power operation to quickly clean the air in a room when, for example, you come home or when you have guests over.

13 Child proof lock
This can be used to prevent small children from mishandling the air purifier.

14 Brightness adjustment
The brightness of the indicator panel lamp can be adjusted.

15 Auto-Restart after Power Failure
The air purifier memorises the settings for mode, airflow, etc., and automatically returns to them when power is restored after a power failure.

16 Stabilizer free
Stabilizer free operation protects the vital components of machine from power fluctuations. With this function installing stabilizer becomes needless (voltage range protection: 180～264V).
If power fluctuation is beyond the limit mentioned then a stabilizer is required.

Test results of Active Plasma Ion device

DAIKIN'S ACTIVE PLASMA ION TECHNOLOGY

The plasma ion technology uses plasma discharge to release ions into the air, which combine with components of the air to form active species with strong oxidizing power like OH radical. They attach to the surface of fungi and allergens and decompose proteins in the air by oxidation.

Daikin's plasma ions have been proved to be safe.
Safety concerning effect on skin, eyes, and respiratory organs
Testing organization: Life Science Laboratories, Ltd.
Name of test: repeated-dose toxicity test
Test number: 12-II A2-0401

Concentration: 25,000 ions/cm^3 *1

Assumed mechanism of elimination

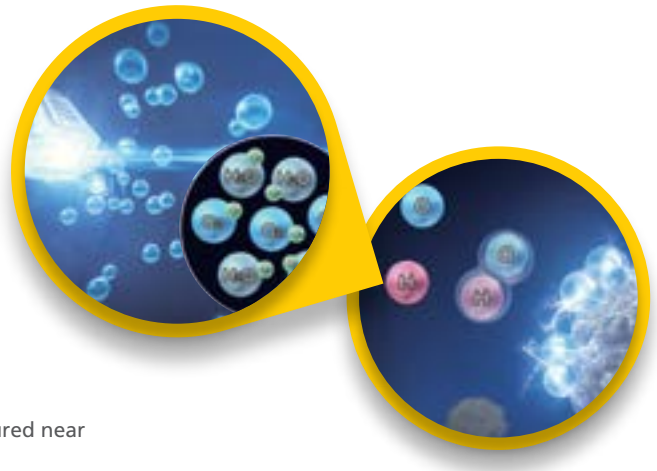
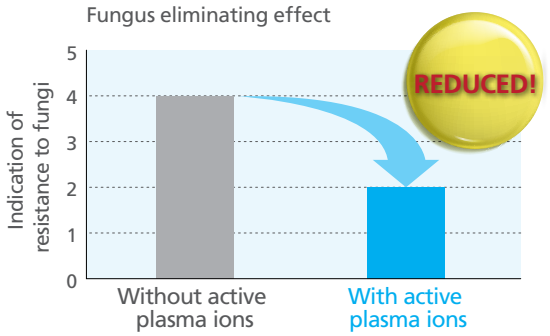


Image is for illustrative purposes

Note:
*1 The number of ions per 1cm^3 of air blown into the atmosphere measured near the air outlet during operation with maximum airflow.
Test conditions: temperature 25°C, humidity 50%

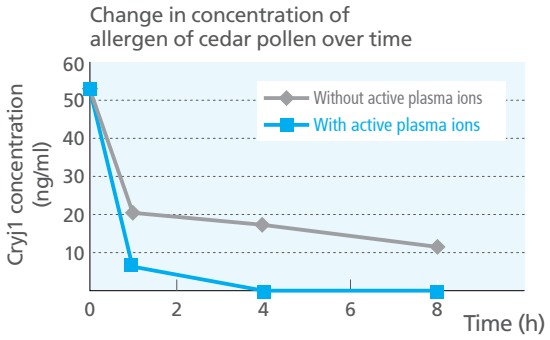
These are effects in an active plasma ion test space and not verification results in an actual operation space.

Reduction of attached fungi



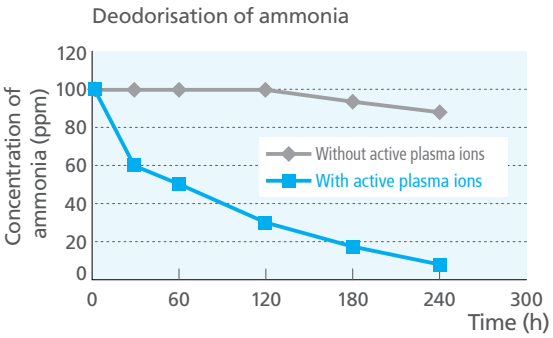
Test name: test of resistance to fungi.
Testing organization: Japan Spinners Inspecting Foundation.
Test number: 019190-1.
Test result: After cultivation in a 9L container according to Japanese Industrial Standard JISZ2911, generation of fungi was reduced to less than half.

Reduction of allergens



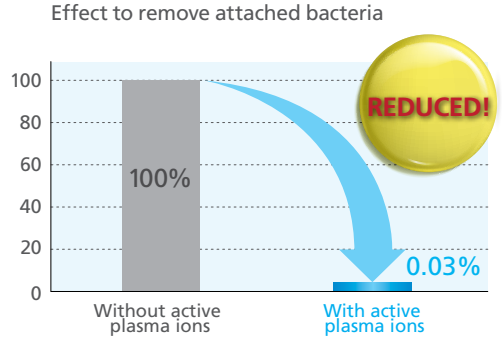
Test name: Test of reduction of allergen of cedar pollen.
Testing organization: ITEA/Institute of Tokyo Environmental Allergy.
Test number: 11MRPTMAY031.
Test result: Allergen of cedar pollen in a 45L container was reduced by more than 95.5% in about 8 hours.

Deodorisation



Test name: Deodorisation test.
Testing organization: Japan Spinners' Inspecting Foundation.
Test number: 200097-1.
Test result: In a 5L container, ammonia was reduced by 92.3% in about 240 minutes.

Reduction of attached bacteria



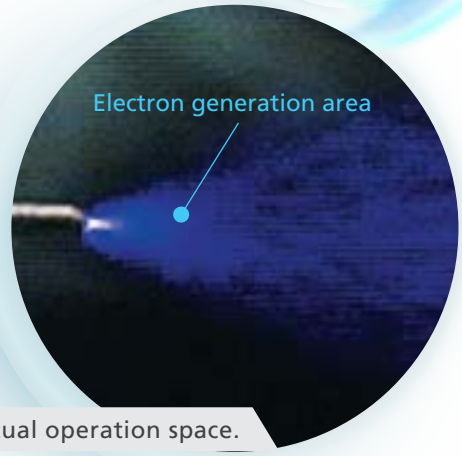
Test name: antibacterial test.
Testing organization: Japan Spinners' Inspecting Foundation.
Test number: 028669.
Test result: In a 9L container, reduced by more than 99.97% in 24 hours

Test results of Streamer devices

Daikin's Streamer Technology

"Streamer Discharge" is a type of plasma discharge which generates high speed electrons that combine with oxygen and nitrogen in the air and turn into active species with strong oxidative decomposition power and thereby eliminate allergens such as mould, mites (droppings and dead mites), and pollen, and hazardous chemical substances such as formaldehyde. Compared to standard plasma discharge (glow discharge), its speed of oxidative decomposition is over 1000 times greater with the same electrical power.

The decomposition power is comparable to thermal energy of about 100,000°C.*1



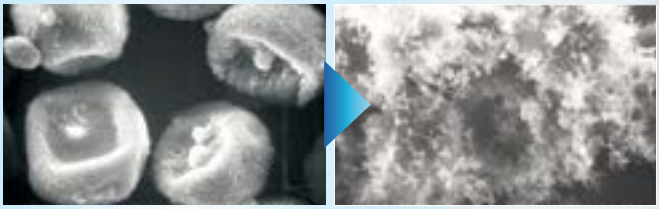
Note:
*1 Comparison of oxidation decomposition. This does not mean temperature will become high.

These are effects in a Streamer test space and not verification results in an actual operation space.

STREAMER DECOMPOSES AND ELIMINATES ALLERGENS such as pollen, mould, and mites (droppings and dead mites) *2 *3

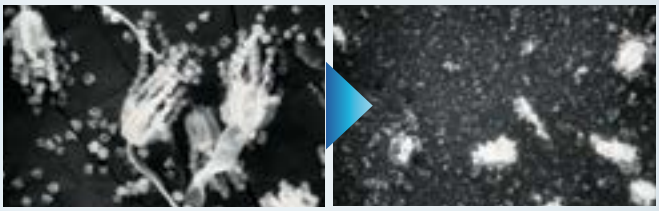
Works on objects caught by the filter.

Before irradiation | 15 minutes after irradiation



- Proved with 13 pollen based allergens including cedar pollen and cypress pollen

Before irradiation | 15 minutes after irradiation



- Proved with 6 fungal allergens including Alternaria and Eurotium

Pollen, mould, and mites (dead mites) were placed on the electrode of the Streamer Discharge unit and then photographed through an electron microscope after being irradiated with Streamer Discharge for 15 minutes.

Joint research with Wakayama Medical University

Decompose and eliminate pollen

Eliminated more than **99.6%** *2 in 2 hours!

Decompose and eliminate mould

Eliminated more than **99.9%** *3 in 24 hours!

Decompose and eliminate allergens such as mite droppings and dead mites

Eliminated more than **99.61%** *2 in 24 hours!

Note:
*2 Testing organization: Wakayama Medical University.
Test conditions: Irradiated allergens with Streamer and checked decomposition of allergen proteins by either the ELISA method, electrophoresis or electron microscopy.
Test result: 99.6% eliminated. (Works on objects caught by the filter)

*3 Measuring method: antibacterial test/mould elimination test
Testing organization: Japan Food Research Laboratories.
Test number: 204041635-001.
Test result: 99.9% eliminated. (Works on objects caught by the filter)

This product can be used to improve the quality of the air by removing airborne hazardous chemical substances, allergens, mould, bacteria, and viruses, etc. However, this product is not intended for the creation of sterile environments or for the prevention pathogen infections.

This description relates to the Streamer Technology devised by Daikin, but not to this Air Purifier. Test results from use of the Streamer Technology are generated according to prescribed test methods conducted by Daikin. Although the Streamer Technology is contained within this Air Purifier, this does not mean that precisely the same results will be experienced using this Air Purifier. Actual results may differ depending on the conditions of product installation and use of the actual product, etc.

Experiment results of the Streamer technology that have been verified so far.

Viruses

Test target	Testing organaization	Test method	Report date
Norovirus	Kobe University Graduate School	ELISA method	12-Jan-2007
Influenza virus (Type A-H1N1)	Vietnam National Institute of Hygiene and Epidemiology	CPE observation	14-Sep-2009
Avian influenza virus (Type A-H5N1)	Vietnam National Institute of Hygiene and Epidemiology	CPE and TCID50	16-Apr-2009
Influenza virus (Type A-H1N1)	Kitasato Research Center for Environmental Science	CPE and TCID50	31-Jul-2009
Influenza virus (Type A-H3N2)	Shanghai City Center for Disease Control and Prevention, etc.	CPE and TCID50	8-Feb-2010
RS virus	Wakayama Medical University	CPE and TCID50	13-Apr-2012
Adenovirus	Kitasato Research Center for Environmental Science	CPE and TCID50	23-Jun-2017
Coxsackievirus		CPE and TCID50	
Enterovirus		CPE and TCID50	
Echovirus		CPE and TCID50	
Measles		CPE and TCID50	
Mouse Norovirus	The University of Tokyo Graduate School	CPE and TCID50	11-Oct-2018
Mouse Coronavirus	The University of Tokyo Graduate School	Plaque assay	28-Apr-2020
Novel Coronavirus (SARS-CoV-2)	Okayama University of Science	CPE and TCID50	8-Jul-2020

Bacteria

Test target	Testing organaization	Test method	Report date
Escherichia coli	Japan Food Research Laboratories	Pour plate culture method	8-Apr-2004
Staph ylococcus aureus		Pour plate culture method	8-Apr-2004
Enterotoxin		ELISA method	25-Aug-2004
Tubercle bacilli	Kitasato Research Center for Environmental Science	Plaque assay	8-Mar-2010
Tubercle bacilli	The Jikei University School of Medicine	PCR method	15-Feb-2010
Vancomycin-resistant enterococci (VRE)	Japan Food Research Laboratories	Pour plate culture method	19-Feb-2010
Methicillin-resistant Staphylococcus aureus (MRSA)		Pour plate culture method	19-Feb-2010
Pseudomonas aeruginosa		Pour plate culture method	12-Apr-2010
Bacillus, Serratia, and Arthrobacter		Pour plate culture method	29-Sep-2010
Escherichia coli		Pour plate culture method	10-Sep-2018
Moraxella bacteria		Pour plate culture method	10-Jun-2019

Molds

Test target	Testing organaization	Test method	Report date
Mold (Black mold)	Japan Food Research Laboratories	Pour plate culture method	28-Sep-2004

Allergens

Test target	Testing organaization	Test method	Report date
Molds and mites (feces and carcasses)	Wakayama Medical University	Observationby electron microscope, ELISA method	14-Sep-2004
Pollen + exhaust gas + PM2.5	Yamagata University under the supervision of Professor Shirasawa, Tohoku Bunka Gakuen University	IgE antibody test, ELISA method	8-Nov-2017
Mites (feces and carcasses) + cedar pollen		ELISA method	8-Nov-2017
Pollens (16 kinds)	L.S.L. Asaka Research Laboratory under the supervision of Project Professor Kusakabe, graduate school of the university of Tokyo	ELISA method	23-Jan-2020

Hazardous gases

Test target	Testing organaization	Test method	Report date
Adjuvant suppression effect (DEP)	Wakayama Medical University National Institute for Environmental Studies	ELISA method	1-Nov-2005
Adjuvant (VOC)	Tohoku Bunka Gakuen University	Attenuation method	8-Dec-2006

This product can be used to improve the quality of the air by removing airborne hazardous chemical substances, allergens, mould, bacteria, and viruses, etc. However, this product is not intended for the creation of sterile environments or for the prevention pathogen infections.

This description relates to the Streamer Technology devised by Daikin, but not to this Air Purifier.
Test results from use of the Streamer Technology are generated according to prescribed test methods conducted by Daikin. Although the Streamer Technology is contained within this Air Purifier, this does not mean that precisely the same results will be experienced using this Air Purifier. Actual results may differ depending on the conditions of product installation and use of the actual product, etc.

The test results obtained for the Streamer discharge device were under laboratory conditions.
The effect and results of products equipped with Streamer technology may vary under actual conditions.

Test results of Streamer devices

Experimental results of Daikin Streamer technology

TESTED BY PUBLIC INSTITUTIONS

INFLUENZA VIRUS	TUBERCULOSIS BACTERIA	ALLERGENS (such as mite droppings and dead mites)	CLADOSPORIUM CLADOSPORIOIDES	POLLEN
99.9%	99.9%	99.9%	99.9%	99.9%
Kitasato Research Center for Environmental Science	Kitasato Research Center for Environmental Science	Wakayama Medical University	Japan Food Research Laboratories	Wakayama Medical University

A clean technology that's recognised by public institutions in Japan and abroad.

★ Following experiments were practised by third parties based on Daikin industries, Ltd's request.

Target of experiment		★ Public institutions (Testing organization)	Test method
Virus		National Institute of Hygiene and Epidemiology (Vietnam)	CPE and TCID50
		Kitasato Research Center of Environmental Sciences	CPE and TCID50
		Kobe University Graduate School	ELISA method
		Yamagata University	Scanning electron microscope
Bacteria		Japan Food Research Laboratories	PCR method
		The Jikei University	CFU
Mould		Japan Food Research Laboratories	Pour plate culture method
Allergens	Pollen based allergens	Wakayama Medical University	ELISA method
	Allergens from animate beings		
	Fungal allergens		
	Flour		
Hazardous chemical substances	Adjuvant (DEP)	Yamagata University	ELISA method
	Adjuvant (VOC)	Tohoku Bunka Gakuen University	Damping technique
	Adjuvant inhibiting effect	Wakayama Medical University, National institute for Environmental Studies	ELISA method
	Formaldehyde	Tohoku Bunka Gakuen University	Constant generation method

Viruses and bacteria that have been proven to be deactivated by Streamer Technology

- Influenza virus (type A, H1N1)
- Highly virulent avian influenza virus (type A, H5N1)
- Bacillus coli, O-157
- Staphylococcus aureus
- Tuberculosis bacteria
- Norovirus
- Pseudomonas aeruginosa
- Toxins (enterotoxins)

Allergens that have been proven to be decomposed by Streamer Technology

- Fungal allergens: sooty moulds, aspergillus, eurotium, aspergillus niger, fusarium, penicillium
- Pollen based allergens: cedar pollen, alder pollen, birch pollen, Japanese cypress pollen, pencil cedar pollen, bald cypress pollen, mugwort pollen, orchard grass pollen, ragwood pollen, sweet vernal grass pollen, timothy grass pollen, fleawort pollen, Japanese beech
- Allergens from animate beings: house dust mite [dermatophagoides pteronyssinus] (droppings and dead mites), house dust mite [dermatophagoides farinae] (droppings and dead mites), American cockroach (droppings), German cockroach (droppings), flea (droppings), dog epidermis (dander), cat epidermis (dander), hamster epidermis (dander)
- Other: wheat flour

Hazardous chemical substances that have been proven to be removed by Streamer Technology

- Formaldehyde*4
- Diesel exhaust particulates (DEP)
- Hazardous chemical substances in exhaust gas: NOx, tetrachlorethylene, benzene, trichloroethylene, dichloroethane, dichloromethane, chloroform
- VOC type hazardous chemical substances: iso-butanol, hexane, styrene, nonanoic acid, trimethyl benzene, xylene, naphthalene, ethyl benzene, toluene, ethyl acetate

Note:

*4 Test method: constant generation method | Test room: 22 to 24 m^3 | Temperature: 23 ±3°C | Humidity: 50 ±20%
Ventilation condition: When concentration of 0.2 ppm is continually emanated, a removal capacity of 0.08 ppm is maintained at 36 m^3/h, which is within the guideline of the Ministry of Health, Labour and Welfare (Japan). (This equates to the ventilation capacity of an approximately 65 m^3 room.)

About the dust collection and deodorising capacity of air purifiers:

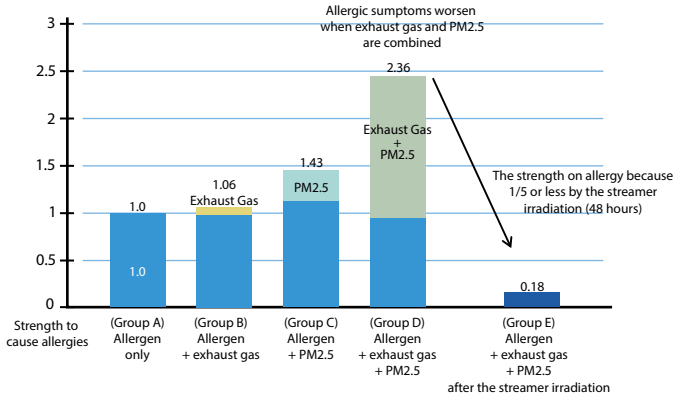
- Not all harmful substances in cigarette smoke (carbon monoxide, etc.) can be removed.
- Not all odour components that emanate continuously (building material odours and pet odours, etc.) can be removed.

This product is not a medical device, medical treatment device or a therapeutic good.
This product is not intended to have any therapeutic use or to be used for the diagnosis, treatment, relief or prevention of illness.
If you have a health concern or are not feeling well, please consult a health care professional.

Simultaneous decomposition of pollen + exhaust gas + PM2.5 which worsens hay fever.

It was found that the streamer technology decomposes cedar pollen, and at the same time, it also decomposes exhaust gas (diesel exhaust particles) and PM2.5 that worsen hay fever, dramatically reducing the intensity of allergic reactions.

Pollen + exhaust gas + PM2.5 are decomposed at the same time, reducing the allergenic strength by 92.4%



As a result of the test, the allergenic strength was 2.36 times higher in the D group, in which exhaust gas and PM2.5 were added to the allergen, than in the A group containing only the allergen. It is speculated that the simultaneous administration of a mixture of exhaust gas and PM2.5 enhanced the immune reaction that causes allergic symptoms such as hay fever. On the other hand, the allergenic strength of group E, which was exposed to the Streamer for 48 hours, was reduced by 92.4% compared to group D.

* This is the demonstration result using a streamer discharge device for testing.
The effect of products equipped with Streamer technology or the effect in actual use environment may differ.

Testing organization

Demonstrated at Yamagata University under the supervision of Professor Shirasawa, Tohoku Bunka Gakuen University

Test method

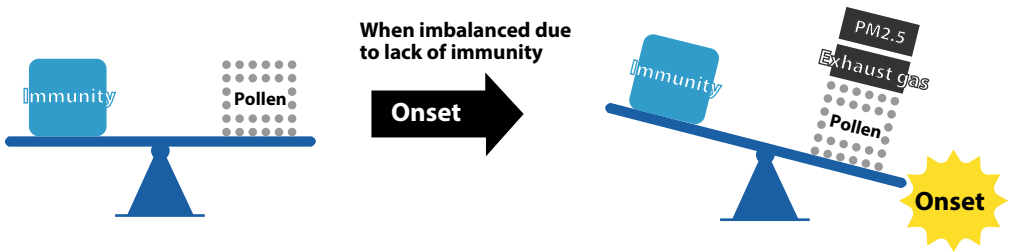
A comparative experiment was performed on 3 groups of mice. (Group A) allergen, (B group) allergen + exhaust gas, (C group) allergen + PM2.5, (D group) allergen + exhaust gas + PM2.5, (Group E) allergen + exhaust gas + PM2.5 after the Streamer irradiation, was administered respectively. Administration to mice was continued every 2 weeks, and 8 weeks later, IgE antibody*1 concentration in the blood of the mice was measured. We used ovalbumin as the allergen, which is a typical substance used in immunity experiments as an alternative to pollen.

*1: When a reaction with an allergen occurs in the body, an IgE antibody that can bind only to the allergen is produced, and when the reentered allergen reacts with the IgE antibody, various allergic symptoms are caused. Since it is detected only in a very small amount in healthy people, it is generally used for immunological tests.

Hay fever development

Adjuvant substances that worsen allergic symptoms may adhere to pollen, which may upset the balance that was previously maintained and increase the risk of developing hay fever.

• The Image of the hay fever development



*(This result was obtained by discharge device for testing in lab conditions. The effect of products equipped with Streamer technology or results in actual use environments may differ.)

Test results of Streamer devices

Experimental results of Daikin Streamer technology

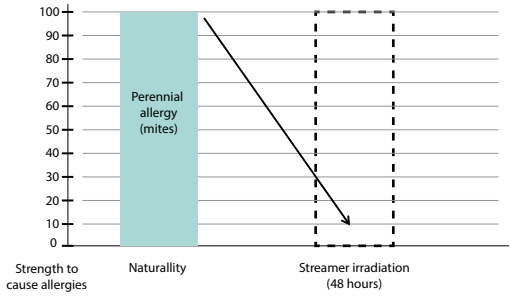
Decomposes molds and mites (feces and carcasses). Suppresses the causes of allergies.

Decomposes house dust (mite's feces and carcasses) that causes perennial allergic symptoms

It has been confirmed that the Streamer technology decomposes house dust (mite's feces and carcasses) that causes perennial allergies. It was also found that when year-round allergy and seasonal allergy are combined, allergic symptoms may worsen or develop, but these causative substances are also decomposed at the same time.

* This is the demonstration result using a streamer discharge device for testing.
The effect of products equipped with Streamer technology or the effect in actual use environment may differ.

Suppresses the deterioration of allergic symptoms caused by mites (feces and carcasses)



As a result of the test, it was confirmed that allergic symptoms caused by mites (feces and carcasses) were suppressed 99% or more in 48 hours by the Streamer irradiation.
This is the demonstration result using a streamer discharge device for testing.
The effect of products equipped with Streamer technology or the effect in actual use environment may differ.

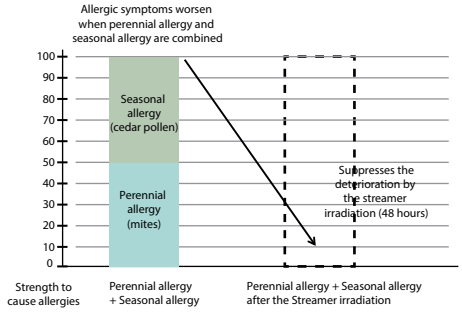
Testing organization

Demonstrated at Yamagata University under the supervision of Professor Shirasawa, Tohoku Bunka Gakuen University

Test method

As a typical causative agent of perennial allergy, the Streamer was irradiated to house dust mite (Dermatophagoides pteronyssinus) at different times. The inactivation rate (the rate of loss of allergic ability) is measured by the allergen activity before and after the irradiation by the ELISA method
(a method of detecting and quantifying the ability of an allergen to bind to an antibody by using an enzymatic reaction).

Suppresses the deterioration of allergic symptoms caused by mites (feces and carcasses) + cedar pollen



As a result of the test, it was confirmed that the 99% or more of the deterioration of allergic symptoms due to mites (feces and carcasses) + cedar pollen was suppressed in 48 hours after the Streamer irradiation.

* This is the demonstration result using a streamer discharge device for testing.
The effect of products equipped with Streamer technology or the effect in actual use environment may differ.

Testing organization

Demonstrated at Yamagata University under the supervision of Professor Shirasawa, Tohoku Bunka Gakuen University

Test method

The house dust mite (Dermatophagoides pteronyssinus) as a typical causative agent of perennial allergy, and the cedar pollen antigen as a typical causative agent of seasonal allergy were irradiated with the Streamer at different times. The inactivation rate (the rate of losing the ability to cause allergies) was measured by the allergen activity before and after the irradiation by the ELISA method (a method of detecting and quantifying the power of an allergen to bind to an antibody using an enzymatic reaction).

*(This result was obtained by discharge device for testing in lab conditions. The effect of products equipped with Streamer technology or results in actual use environments may differ.)

NOTE

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Saturday, Sunday & Public Holiday: Closed

(Showroom)
Monday to Friday : 9:00 am to 6:00 pm
Saturday, Sunday & Public Holiday : Closed

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Monday to Friday : 9:00 am to 5:00 pm
Saturday : 9:00 am to 12:00 pm
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