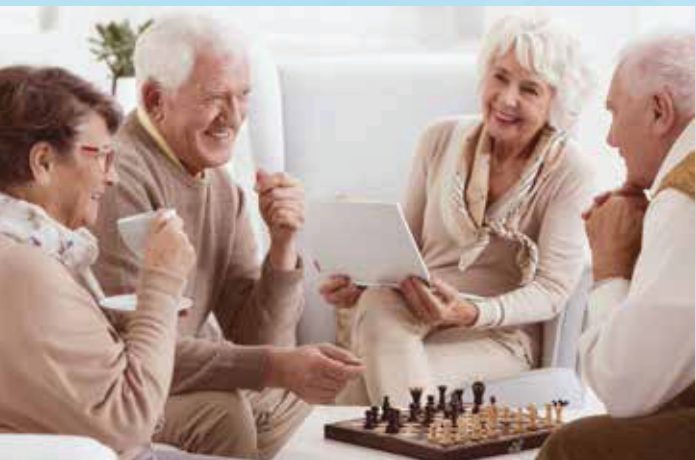




# GermCure

ADVANCED DISINFECTION SOLUTIONS

DISINFECTS AND PURIFIES THE AIR YOU BREATHE



The GermCure AIR160 employs the same three air disinfection technologies used to purify the air in hospital operating theatres; so it genuinely eliminates viruses, bacteria, moulds and other pollutants.



*purify*  
YOUR AIR BY  
**99.99%**



# For premium air quality

Many 'air-purifiers' make sweeping claims that are in fact cleverly worded to deceive. They claim to purify the air to 99.9%, but reading the fine print, they are just filter systems that take out the larger particles to this level.

**GermCure AIR160** is different! It can actually deliver on its promise because it uses three different high-performance technologies: Filtration, UV-C Light Disinfection AND Air Ionization, to eliminate contaminants and micro-organisms.

Three high-performance air-purification methods are uniquely combined into a single high-tech unit that is suitable for smaller areas up to 100 m<sup>3</sup>.

Purifying the air you breathe is no longer a superfluous luxury. An increasing number of micro-organisms and chemical pollutants are commonly found in the air we breathe in indoor environments; including viruses, bacteria and moulds. These all make our air less healthy to breath.

**GermCure AIR160** is a compact, stand-alone system, immediately ready-for-use with simple installation and maintenance. Easy to service, stylish and effective; it's the perfect air purifying system for so many applications.



**purify**  
YOUR AIR BY  
**99.99%**



# Poor indoor air quality is doing you harm...

You will be shocked by what's in the air you breathe!



**GermCure AIR160 IS EFFECTIVE AGAINST;**

**BIOLOGICAL ORGANISMS** - including bacteria and viruses such as Q fever, swine flu and whooping cough, pollen, dust mites, mould.

**CARBON MONOXIDE** - in our air from exhaust particulates.

**FORMALDEHYDE** - a common chemical present in more than 3,000 products including adhesives, fibre board, panels, curtains, blinds, fabrics, etc.

**TOBACCO SMOKE** - nicotine, formaldehyde.

**VOLATILE ORGANIC COMPOUNDS (VOCs)** - compounds which easily become vapours or gasses and can be breathed in, including benzene, carbon tetrachloride, etc.

VOCs come from commonly used products such as paint thinners, moth repellents, air fresheners, glues, copiers/printers, aerosol sprays, automotive products, dry cleaning fluids, petroleum based products, etc.



## HEALTH EFFECTS FROM POOR AIR QUALITY;

- Allergic and asthmatic symptoms
- Lung cancer
- Chronic Obstructive Pulmonary Disease (COPD) and chronic respiratory problems.
- Respiratory Diseases
- Cardiovascular Disease (CVD) - due to accumulation of particulate matter in the lungs.
- Odour and irritation - 'sick building syndrome'.



# Fresh, clean air in 3 steps...

## 3

### IONIZATION – PURIFIES



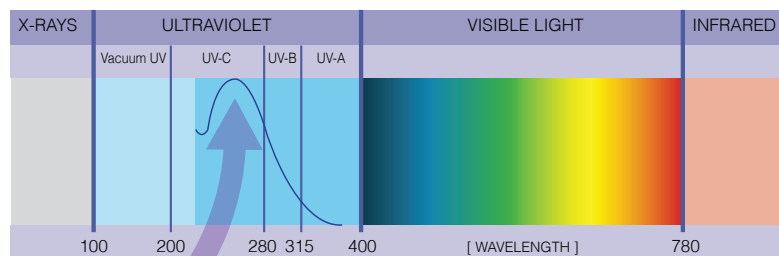
- After the UV-C treatment, the ionizer launches 8.5 million negative ions per  $\text{cm}^3$  into the treated air.
- Poor air contains many positive ions. Micro-organisms easily spread through the air using these positive ions, as do dust, pollen and other pollutants. Fresh air typically contains up to 4,000 negative ions per  $\text{cm}^3$ , but this figure is much lower in enclosed rooms, often well below 50 ions per  $\text{cm}^3$ .
- The negative ions introduced by the **GermCure AIR160's** Ioniser form compounds with the positive ions present. The compounds thus formed are too heavy to float in the air; so they sink down and are captured by the 3M HAFE filter.
- The large number of negative ions produced improves the resistance of the human body, and may even promote healing processes.

## 2

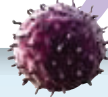
### UV-C RADIATION – STERILISES & ELIMINATES MICRO-ORGANISMS

- The air is then treated with UV-C radiation via the high-performance Philips UV-C lamp, generating ultraviolet radiation with a wavelength of 253.7 nm. The UV-C light destroys the DNA (cellular structure) of viruses, bacteria, moulds, fungi and other micro-organisms and prevents their reproduction. This ensures disinfected air, free of these dangerous micro-organisms in a healthy and efficient way.

- The unique aluminium lining of the Disinfection Chamber reflects the UV-C radiation back into the centre of the Chamber, to better ensure the total destruction of micro-organisms, since they are hit with UV-C radiation from all angles.



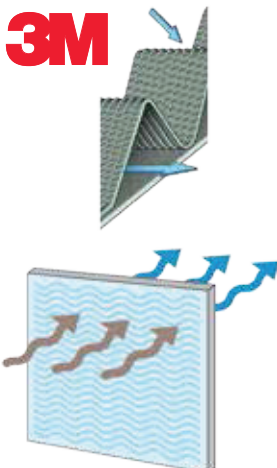
UV-C Light Destroys Micro-organisms at 253.7nm



## 1

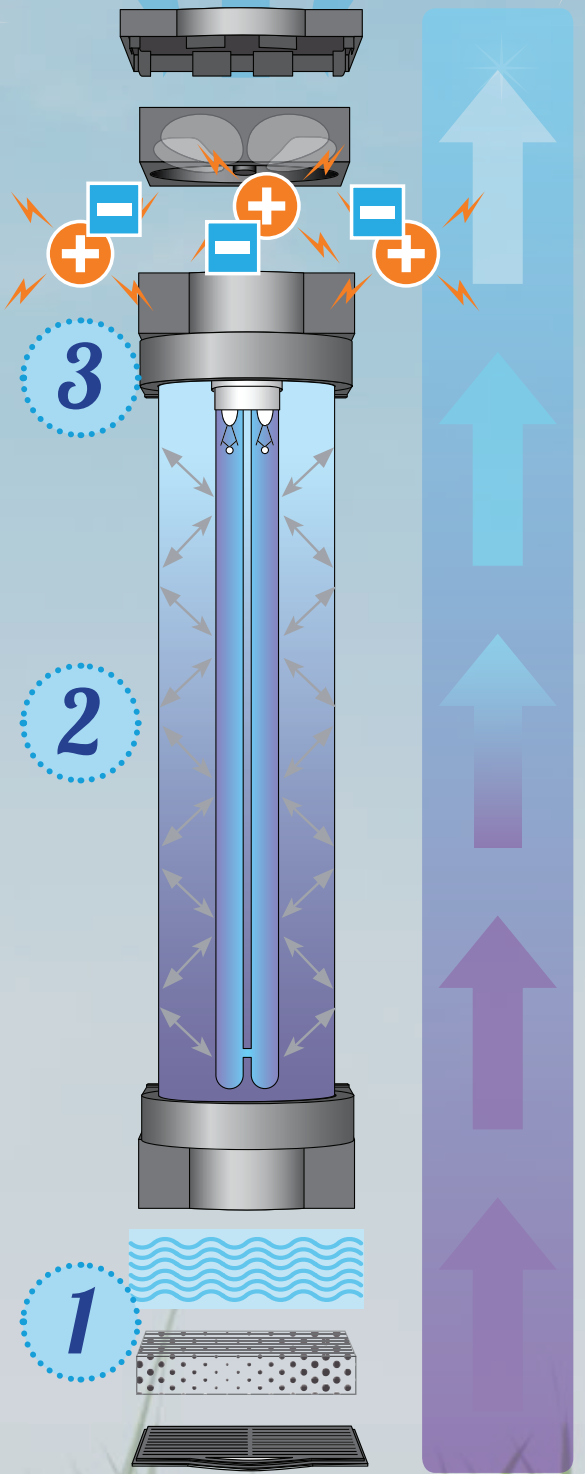
### FILTRATION – REMOVES AIRBORNE PARTICLES AND POLLUTANTS

## 3M



- A quiet, high-performance Ventilator draws the air through a hospital-grade 3M High Air Flow Electrostatic (HAFE) Filter into the Disinfection Chamber.
- 3M HAFE filters use an electrostatic charge, to operate with twice the efficiency of standard filters, so attract, capture, and retain more pollutants and particles. Plus, the filter's open channel structure ensures maximum particle removal and maximum airflow.
- The 3M HAFE filter also keeps the Disinfection Chamber of the **GermCure AIR160** cleaner, so optimised air disinfection is guaranteed.
- The 3M HAFE filter includes an antimicrobial agent that prevents mould growth further increasing performance.
- Airborne dust capture also helps maintain productivity of in-room heating and air-conditioning units.

## FILTERED, IONIZED & DISINFECTED AIR



## ADVANTAGES OF THE GermCure AIR160

- Disinfects and purifies the air up to 99.99%
- Eliminates micro-organisms that are present in the air
- Improves the quality of the air/promotes a comfortable feeling
- Purifies the air in enclosed areas
- Has a positive effect on your health
- Strengthens the resistance of the body against diseases
- Inhalation allergies are reduced or disappear
- Anxiety and depression can be reduced, or disappear
- Diseases can be prevented

## EFFECTIVE AGAINST

- ✓ Viruses - including influenza, whooping cough & more
- ✓ Bacteria
- ✓ Moulds
- ✓ Fungi
- ✓ Mites
- ✓ Dust and particulates
- ✓ Pollen
- ✓ Cigarette smoke
- ✓ Harmful gases
- ✓ Odours



PERFECT FOR > Childcare Centres & Pre-schools  
 > Aged Care > Waiting Rooms > Surgeries & Clinics  
 > Restaurants > Offices > Stores

**Clean air** in our living environment is better for our health. Pure air not only increases the resistance of the body against diseases, but also reduces respiratory problems, and can prevent such problems completely. The **GermCure AIR160**;

- ✓ Is suitable for areas up to 100 m<sup>3</sup> - circulating up to 50 m<sup>3</sup> air per hour.
- ✓ Draws air into the underside using a ventilator creating good air circulation.
- ✓ Uses a Hospital Grade 3M High Air Flow Electrostatic (HAFE) Filter with Antimicrobial Coating to remove airborne particles and pollutants.
- ✓ Uses a Philips UV-C lamp to disinfect the air with Ultraviolet Radiation destroying viruses, bacteria, moulds and other micro-organisms.
- ✓ Uses a high-performance ionizer to purify and refresh the air.
- ✓ Employs integrated time monitoring to keep accurate track of operating hours.
- ✓ Features reduced noise levels and compact unit size.



#### TECHNICAL SPECIFICATIONS

> AIR160 unit	: 65 Watt
> Philips PL-L 60 W/4P HO lamp	: 60 Watt
> UV-C Dose	: 4.23 mj/cm <sup>2</sup> (air flow 50 m <sup>3</sup> /hr)
> UV-C (YI) output	: 19.0 Watt
> UV-C (%) after 8,000 hours	: 85 %
> Filter	: 3M™ High Air Flow Electrostatic (HAFE)
> Ventilator	: 12 Volt
> Max. area capacity	: 100 m <sup>3</sup>
> Max. throughput	: 50 m <sup>3</sup> of air per hour
> Dimensions	: 600 x 170 x 150 mm
> Recommended run time	: 24 hours per day
> Maintenance	: Replace UV-C Lamp & Filter annually



**Mariaan Viljoen**  
 082 907 7494  
 mariaan@germcure.co.za



**Francois Viljoen**  
 082 805 0405  
 cois@germcure.co.za

www.germcure.co.za