

YOUR SAFETY IS OUR COMMITMENT.

BIOAIR





pipette
baby

D-PRIME
DIA-BICCO S-TRISPHOSPHATE
BUFFERED SALINE

Lot No.	EC 64936
Lot No.	6314010720
Volume	500 ML
Exp. Date	04/2019
Code	HT

Paula Brenneke

CELL CULTURE



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OVER 40 YEARS OF EXPERIENCE

BioAir has been manufacturing Biohazard and Laminar Air Flow cabinets since the early '70s, when the Gelaire® brand became the “gold standard” for airborne contamination control in laboratories all over the world.

A family of Recirculating Fume Hoods, based on the adsorption of toxic vapors by charcoal filters, was successfully introduced a few years later, thus positioning the Company as the only one seriously focused on the protection of its operators, in line with its inspiring motto “Your safety is our commitment”.

This unique know-how and insistence on quality were continually developed, and 25 years on, under the name of BioAir®, the entire range was completely re-designed to meet the changing requirements of laboratory staff and increasingly stringent regulations.

At the top of the range are the Biohazard Cabinets (or Microbiological Safety Cabinets - MSC), the sum of the Company's know-how, certified to European standards (EN12469:2000) and also complying with Australian regulations. In other words, they are designed to provide technicians with the maximum level of safety when used according to GLP/GMP standards in their respective environments.

PLUS BIOAIR

MADE IN ITALY

Our products are designed and produced in Italy, drawing on the long tradition and internationally recognized high quality of Italian manufacturing, to bring you the best equipment for your safety.

TRADITION AND EXPERIENCE

All our Microbiological Safety Cabinets were designed with your safety in mind and that's a task where even the smallest details count. Our team stems directly from the company that launched the market for MSCs in Europe, so we put a lot of history and experience into all our products, as well as care over those often-overlooked details that improve your safety.

WE CARE FOR YOU

Thanks to our network of highly trained dealers and distributors, our complete portfolio and long experience in the field, we will always be able to help you find the right product for your needs, no matter how unique they are. And our commitment doesn't stop there: our Service network will make sure your equipment always performs at its best.

Today, in a facility occupying over 2,800 square meters, BioAir manufactures a full range of microbiological safety cabinets, laminar flow cabinets and fume cupboards, with over 15 models, many of which available in different sizes. Customized models and cabinets designed for specific applications can be produced by our team of skilled engineers and operators.

Decades of experience in sales and support for cell biologists have enabled BioAir to give the market an extremely innovative CO₂ Incubator, the Safegrow® PRO, the fruit of deep knowledge of the optimum conditions required for critical tissue culture methods and input from scientists engaged in growing cells in vitro.

The core business of the recently established BioAir® Industrial Team is the design, manufacturing and validation of customized equipment for the protection of the operator and of the product in pharmaceutical and healthcare production facilities.

This dedicated team will leverage the long experience and production capability acquired in laboratory LAF applications to offer complex equipment ranging from **dispensing/sampling Downflow Booths** and **Clean Rooms** to **RABS** and **Isolators** for Regenerative Medicine and Advanced Cell Therapy.

PRODUC PROTECT



**EXTREME CLEANLINESS
(ISO3)**



ATTENTION

LAMINAR FLOW CABINETS

AURA HZ

HORIZONTAL LAMINAR FLOW CABINET

A COMPLETE AND USER FRIENDLY TOOL FOR THE PROTECTION OF HIGHLY SENSITIVE PRODUCTS

The internal design, the air flow aerodynamics and monitoring, the special H14 filter with Micromesh downstream equalising plenum, guarantees the highest performances at the most stringent safety levels and operator comfort.

- ✓ High efficiency washable polyurethane prefilters
- ✓ H14 class HEPA filter
- ✓ Electronic control air speed
- ✓ Working surface in stainless-steel (AISI304)
- ✓ Side panels in tempered glass
- ✓ Micromesh membrane on HEPA filter downstream surface for perfect airspeed distribution
- ✓ Up to four plugs installable near the light on the ceiling of the cabinet to leave working surface free
- ✓ Sizes: 1.2, 1.8



⊕ Lateral Flow Concept side walls

AURA SDV

VERTICAL LAMINAR FLOW CABINET

This full sized 1.2 m cabinet provides plenty of room to work with sensitive products in a clean environment.

- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ White painted steel working area to increase lighting
- ✓ Stainless-steel working surface
- ✓ Sizes: 1.2



AURA MINI

VERTICAL LAMINAR FLOW CABINET

WHEN SPACE MATTERS

This compact benchtop laminar flow cabinets provide all you need to keep your products clean and protected without taking away your lab space.

- ✓ Centrifugal Motorblower with digital inverter for optimal performance
- ✓ Elapsed time-meter
- ✓ Exhaust filter
- ✓ Removable perforated work surface and back wall of the work chamber made of AISI 304 stainless steel
- ✓ Cabinet outer surfaces made of cold rolled steel with paint finish
- ✓ Front and side panels in 5mm thick tempered glass
- ✓ H14 class HEPA (EN1822-1)
- ✓ Exhaust filter (or pre-filter) type Filtrete® with a gravimetric efficiency higher than 99% on 3 µm particles
- ✓ Optional cover with UV light (includes safety switch to turn off UV if cover is removed from the cabinet)



⊕ Dual operation system

INWARD air barrier. In this configuration an air barrier flows through the front opening and is recirculated with the downflow air by a motor blower. 70% of the air is returned to the work area through the main HEPA filter and 30% is exhausted into the environment through a Filtrete® exhaust filter with gravimetric efficiency of 99% on 3 µm particles. In this configuration an excellent product protection is ensured, as well as an outstanding containment.

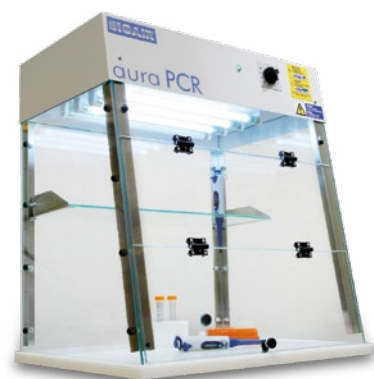
OUTWARD air barrier. In this case the air is sucked through the Filtrete® prefilter, mixed with the incoming recirculating air and then filtered through the main HEPA filter into the work area: here 30% of the air is exhausted through the front opening and 70% is recirculated. This configuration ensures the highest product protection. In the OUTWARD configuration this unit can easily be used as an "active PCR" cabinet for DNA carry over blocking.

AURA PCR

DNA CROSS-CONTAMINATION CONTROL ENCLOSURE

These state-of-the-art PCR cabinets are specially designed for pre-amplification sample preparation in controlled environment in order to prevent DNA carry-over. Any aerosol generated during the handling of the post amplification samples cannot enter the cupboard; any molecule of DNA herein contained is subsequently neutralised with the help of UV radiations.

- ✓ Passive PCR enclosure (non ventilated)
- ✓ Fluorescent light turns on automatically when opening the front glass or when UV lights turn off (user selectable)
- ✓ Digital timer for UV lights with memory of the last setpoint
- ✓ 100% UV-safe
- ✓ Front glass divided in three hinged sectors
- ✓ Internal foldable shelf in glass
- ✓ Working surface in chemical resistant polyethylene



⊕ Working area walls in tempered glass 6 mm thick

CROSS PROTECT



**ANTI-OBSTRUCTION
FRONT GRILL: HIGHER SAFETY
AND COMFORT**



**FULLY STAINLESS-STEEL
WORKING CHAMBER:
BETTER CLEANABILITY**



**TIGHT-SEAL CLOSING
SYSTEM: IMPROVE
YOUR SAFETY**



TION

**MICROBIOLOGICAL SAFETY
CABINETS | BIOHAZARD**

SAFEMATE EZ

CLASS II MICROBIOLOGICAL SAFETY CABINET

STAY SAFE THE EZ WAY

Including premium features in an entry level priced cabinet, the SafeMate EZ series allow everybody to stay safe in an easy way.

- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Sizes: 1.2, 1.8



SAFEMATE ECO

CLASS II MICROBIOLOGICAL SAFETY CABINET

GREEN EVOLUTION

Safemate ECO Series evolves from our bestseller Safemate Series adding an eco-friendly approach: the new EC Motorblowers enhance significantly the efficiency of the Cabinet reducing operating costs and improving building energy balance thanks to the lower heat output.

- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Side glasses
- ✓ Available also in Class I configuration (Operator/Environment protection only)
- ✓ Sizes: 0.9, 1.2, 1.5, 1.8



⊕ Power efficient EC Motorblower with digital inverter

⊕ TUV Nord Certification & GS Quality Mark

SAFEMATE EVO

CLASS II MICROBIOLOGICAL SAFETY CABINET

THE EVOLUTION OF MICROBIOLOGICAL SAFETY

The new Safemate EVO Series is the culmination of BioAir's more than 30 years of experience in designing and manufacturing microbiological safety cabinets.

Inheriting its predecessors' safety features and longstanding reliability and expanding them with new and improved functionalities, the Safemate EVO Series cabinets embodies once more our company motto.

- ✓ Power efficient EC Motorblower with digital inverter
- ✓ TUV Nord Certification & GS Quality Mark
- ✓ Double skin side walls to improve front barrier
- ✓ One-Knob control system
- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Side glasses
- ✓ Sizes: 1.2*, 1.5, 1.8* (*also available in dual-blower configuration)



- ⊕ **Textile PlenumPlus technology to improve airflow uniformity and reduce noise**
- ⊕ **Advanced front glass cleaning system**

SAFEFLOW TWO

CLASS II MICROBIOLOGICAL SAFETY CABINET

THE NEW LOOK OF SAFETY

Being safe has never looked so appealing! The new look of the Safeflow Two is not just for show! This mix of plastic & steel elements allowed us to create a very soft looking cabinet: the curved design helps reducing the bulkiness of standard cabinet design, easing the strain on the eyes!

- ✓ Power efficient EC Motorblower with digital inverter
- ✓ TUV Nord Certification & GS Quality Mark
- ✓ Double skin side walls to improve front barrier
- ✓ Textile plenum to reduce noise
- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Side glasses
- ✓ Sizes: 1.2



- ⊕ **Touch-screen control system**
- ⊕ **Advanced front glass cleaning system**

SAFEMATE CYTO

CLASS II MICROBIOLOGICAL SAFETY CABINET FOR CYTOTOXICS MANIPULATION

BioAir cytotoxic drugs preparation Cabinet Safemate Cyto has been designed and built according to DIN12980 and EN12469:2000 standards and provides the laboratory technician with the maximum level of safety against inhalation of aerosols generated during the reconstitution protocols.

- ✓ Triple HEPA H14 filtration system
- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Sizes: 1.2, 1.8



- ⊕ Patented BagIn/BagOut system to replace first stage filters safely

SAFEMATE TOTAL

CLASS II TYPE B2 MICROBIOLOGICAL SAFETY CABINET

TOTAL EXHAUST, TOTAL PROTECTION

For all the processes involving the use of some chemicals while requiring the same level of cross protection provided by a Class II cabinets.

- ✓ V-shaped anti obstruction front grill
- ✓ Electrically operated front glass
- ✓ Tight seal closure system
- ✓ Full stainless-steel working area
- ✓ Sizes: 1.2



SAFE3

CLASS III MICROBIOLOGICAL SAFETY CABINET

MAXIMUM SAFETY

Class III Microbiological Safety Cabinets provide the highest level of containment, allowing to manipulate up to risk group 4 pathogen in a safe way. The Safe3 series cabinets have been built according to the most stringent parameters defined by the EN12469:2000 and include an exclusive four filter system to provide even more protection to operators and environment!

- ✓ Transfer hatch with interlocked doors
- ✓ 2 filters air inlet (one G4 + one H14 HEPA)
- ✓ 2 filters air outlet (two H14 HEPA)
- ✓ Magnehelic gauge to monitor operating pressure at a glance
- ✓ Volt-free connector for controlling remote exhaust fan
- ✓ Two gloves (size selectable)
- ✓ Size: 1.2



EMBRYOSAFE

SAFETY CABINET WITH OPERATOR PROTECTION FOR IVF AND STEMCELL MANIPULATION

THE NEW WAY OF WORKING WITH STEM CELLS

EmbryoSafe/StemSafe Series workstations are dedicated to IVF and stem cells manipulation. Temperature, humidity and CO₂ concentrations control together with an aseptic working conditions environment are key factors for a successful and reliable process. For the most demanding applications a biohazard environment is required.

EmbryoSafe/StemSafe is a high retention efficiency recirculating cabinet engineered to provide the same level of safety required by the EN12469:2000 European Standard for Microbiological Safety Cabinets, that offers Product, Operator and Environment Protection with the plus of a working environment dedicated to IVF procedures and stem cell culturing.

- ✓ Integrated light source compatible with Olympus SZX series stereoscopes
- ✓ Integrated glass heated work area with temperature control
- ✓ Front controls for temperature and microscope light intensity & contrast
- ✓ Optional backwall monitor for microscope camera connection
- ✓ Side glasses
- ✓ Stainless steel working area
- ✓ Sizes: 1.2, 1.8 (with dual microscope option)



⊕ High level protection (Apf >10⁵)



FUME HOODS



ENERGY SAVING



HIGHLY CONFIGURABLE



Safehood 120 detail



SAFEHOOD

ACTIVE CHARCOAL FILTRATION HOODS

PLUG&WORK FUME CUPBOARDS

Working with volatile toxic substances is not a problem when using a Safehood ductless work station. No cumbersome installation needed, and minimum space requirements makes Safehood the easiest way to solve your safety problems when handling toxic chemicals.

- ✓ Wide range of charcoal filters
- ✓ Filter saturation sensor
- ✓ VAV design
- ✓ Select between stainless steel or polypropylene work surface
- ✓ Up to 4 taps for gases/water
- ✓ Side windows for increased visibility
- ✓ Manual sliding front glass



CO₂ INCUBATOR



EASY TO CLEAN



HIGH RELIABILITY



HIGH UNIFORMITY



Safegrow detail



SAFEGROW PRO

CO₂ INCUBATOR

DESIGNED FOR COMFORT

With their high performance and high quality, the Safegrow incubators provide the ideal environment for cell growth, whether you are using primary cell lines or stem cells.

Comfort for cells...

The Advanced Direct Heating system, with its 4 independently controlled elements and 7 thermal sensors, provides unparalleled temperature uniformity and the solid-state IR CO₂ sensor guarantees the most precise control on gas levels.

...and users!

The seamless internal chamber and the fully removable shelving system with 4 non-perforated shelves allow for extremely easy and effective cleaning! The integrated on-demand High Temperature Decontamination cycle completes the system allowing to keep contamination events under control!

- ✓ 4 solid surface stainless steel removable shelves
- ✓ State-of-the-art Direct Heating system
- ✓ IR CO₂ sensor
- ✓ High Temperature decontamination cycle
- ✓ No internal fans
- ✓ Fast and accurate recovery of uniformity
- ✓ 188.6L of internal volume



⊕ **Stainless steel seamless chamber**

⊕ **High Temperature decontamination cycle**

INDUSTRY EQUIPMENT



**DEDICATED
R&D TEAM**



**CUSTOMIZED
PRODUCTS**



**INTERNATIONAL
SUPPORT NETWORK**



RIAL
ENT

MODULAIR

AIR FILTRATION MODULES

Developed to satisfy the most various needs of every customer, the **Modulair 1400** system allows customized configuration of contamination free areas by properly connecting the modular units.

Each module is an autonomous laminar flow generator that guarantees an ISO 5 air classification as indicated in ISO EN 14644-1.

The Modulair units are composed of a base module that can be completed with a series of accessories and components that allow to create a customized configuration.

The base module has not only filtration and ventilation capability but also has a structural function that reduces the number of standing supports or suspension points of the final assembled system.



SAFE SP

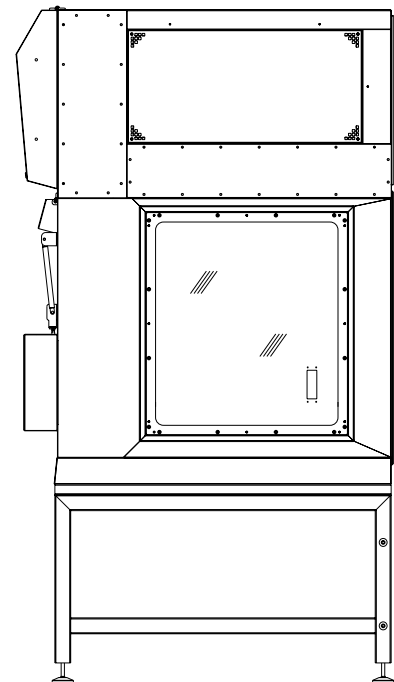
CABINETS FOR ROBOTS

Safe SP cabinets have been designed to provide a sterile environment for automation robots. The airflows have been designed according to EN12469 specifications in order to ensure protection for product, operator and environment.

The features of the Safe SP series are designed to provide ample space to fit and work with the robots, while keeping external size to manageable values in order to fit inside every lab!

The cabinets are shipped disassembled in various components and are reassembled during installation!

- ✓ Maximum height < 270 cm (including support stand)
- ✓ Lateral exhausts, allows installation even with minimal space between cabinet and ceiling
- ✓ Lowered liquid retaining work surface: height from ground 848 mm
- ✓ Removable front barrier grid for easy robot installation and maintenance: height from ground 1000 mm
- ✓ Removable side windows for easy maintenance of the robot
- ✓ Front aperture in operation: 250 mm; with front glass fully opened and removed front barrier grid: 915 mm
- ✓ Sizes: 2.4, 2.8



SAFEBOOTH

WALK-IN POWDER WEIGHING CABINET

The Safebooth is a down flow booth system for powder containment in sampling and dispensing operations, a containment solution for the weighing, the handling and the dosing of

chemical and pharmaceutical not sterile and not active products with the operator inside the LAF (laminar air flow) area.

The standard unit may be useful to reach a containment level better than $100 \mu\text{g}/\text{m}^3$ depending on the pharmaceutical process; with the use of safety barriers it is possible to reach a containment value better than $30 \mu\text{g}/\text{m}^3$.

- ✓ Custom size
- ✓ Inner air cleanliness: ISO5 according to ISO EN14644-1
- ✓ 10% exhaust, 90% recirculation
- ✓ Cooling coil to avoid temperature increase in the work area
- ✓ Configurable prefiltration system (up to H13 HEPA filters)
- ✓ Dual H14 HEPA main filtration system (LAF and Exhaust)



SAFETHROUGH

PASS-THROUGH HATCHES

Pass-through units protect critical environments while allowing transfer of materials to or from adjoining rooms. Materials can be transferred in both directions through interlocked doors. SafeThrough units can be passive or provided with one or more sanitization cycles (LAF; U.V.; vaporized H_2O_2 ; external VHP system).

- ✓ Active ventilation, HVAC or Non-vented type
- ✓ Fully made in stainless-steel AISI 304 or AISI 316
- ✓ Chamber surfaces and shelves with radiused corners all around
- ✓ Choice of shelves surfaces: perforated type, or liquid retaining solid tray
- ✓ Stainless-steel framed doors with multilayer safety glass 6 mm tick view screen
- ✓ Wide selection of body dimension



ISOCELL PRO

ADVANCED THERAPY ISOLATOR



**EVERYTHING YOU NEED
FOR CELL AND GENE THERAPY PRODUCTS
AT YOUR HAND.**

Producing advanced therapy medicinal products (ATMPs) for therapeutic purposes is a complex task, for which aseptic conditions are only one part of the requirement. Apart from the clean room zone itself, you need trained operators and strict procedures to prepare the room and the people involved to be ready for the process. This requires huge efforts in terms of infrastructures, personnel training and compliance.

BioAir, with its ISOCell PRO Cell Therapy Isolator, can be the answer to your needs by providing a streamlined workflow environment reducing the set up and running costs of cell therapy products preparation while still operating within the restrictive confines of various regulatory bodies (FDA, EUP, USP) and industry guidelines (GMP, PDA).

PLUS

- ✓ Simplicity of the ISO 5 location and easy gowning for most applications since isolator systems dedicated to cell production may be located in a Class D room with restricted access
- ✓ Security with validated sterility of the working area and cross-protection of product/operator/ environment
- ✓ Traceability for all the steps of the sterile handling process
- ✓ The initial sterility is provided by a dedicated H₂O₂ vapor (HPV) program to bio-decontaminate the work area and the material access area
- ✓ The sterility is maintained with the positive pressure of HEPA-filtered air. The outlet HEPA prevents against any return of non-sterile air
- ✓ System is designed to be used in validated GMP processes



TRYPAN BLUE 0.5%
Cat. No. E11000003
Lot No. E1100000347
Volume: 100 mL
Exp. Date: 06/2015
Revised: 01/14

RPMI 1640 MEDIUM
Cat. No. E11000006
Lot No. E1100000359
Volume: 500 mL
Exp. Date: 06/2014
Revised: 2/07

D-PRG DULBECCO'S PHOSPHATE BUFFERED SALINE
Cat. No. E11000005
Lot No. E1100000726
Volume: 500 mL
Exp. Date: 04/2014
Revised: 07/11





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