



PROTECTING YOUR DNA SAMPLES FROM CONTAMINATION

# UV Sterilisation Cabinet & UV PCR Workstation



## DESCRIPTION & OPERATION

When undertaking PCR reactions it is important to protect against contamination by rogue DNA. The cabinet, reagents and equipment must be thoroughly decontaminated prior to a PCR procedure. UV irradiation is an efficient steriliser, breaking down DNA sequences so that replication cannot occur in a subsequent amplification process.

The necessary UV exposure times vary from as little as 5 minutes to a maximum of 30 minutes.

UV is effectively utilised in both the Bigneat UV Sterilisation Cabinet and the Bigneat UV PCR Workstation. The UV PCR workstation additionally protects against contamination by bathing the PCR apparatus in sterile air and limiting risk of contamination from the operator's arms, or from any equipment bought into the otherwise sterile environment.

A positive pressure ensures that there is no ingress of airborne contaminants from the surrounding laboratory environment.

Acrylic windows offer exceptionally clear all round vision and additionally do not allow transmission of UV.

## FEATURES OF UV STERILISATION CABINET

- **Powerful UV tube lights are combined with carefully located optical reflectors to ensure uniform intensity distribution of the UV radiation throughout the cabinet**
- **Control system allows the choice of timed UV exposure from 5-30 minutes**
- **Door sensors switch off UV lamps if door flap is opened, ensuring operator safety**
- **Acrylic protects the operator from beta emissions from commonly used 32P labelled compounds**
- **Cabinet is supplied with handy corner shelves, which do not hinder the working area. Door flaps offer excellent access to the cabinet interior**
- **18W white lights, operated from an external switch, illuminate cabinet interior**
- **Side panels include ports for cable access**

## FEATURES OF UV STERILISATION CABINET

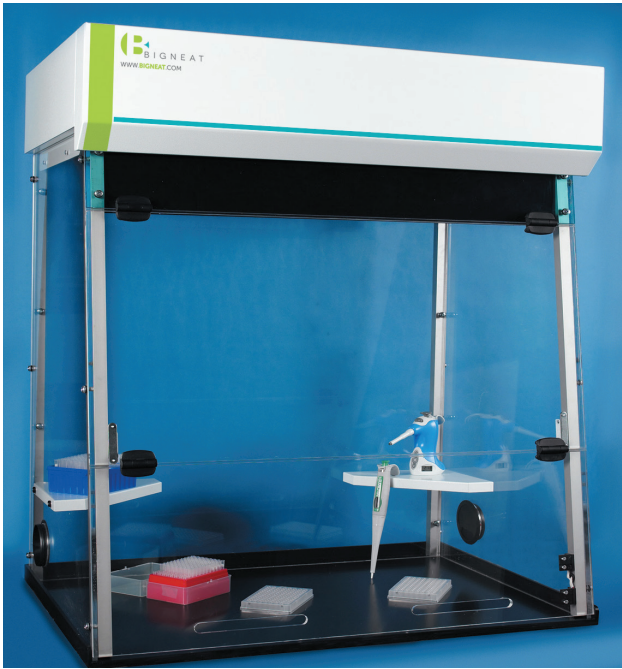
**All the features of the UV Sterilisation Cabinet.**

### PLUS

- **Filtration system delivers air to Class 5 quality**

### SPECIAL BIGNEAT FEATURE

- **Automatic fan speed increase on door opening maintains air velocity to 0.45m/s at the workstation front**
- **Electronic filter saturation indicator**
- **Fan noise level <50 dBA**



BC UV Sterilisation Hood

## FILTRATION & STANDARDS

**Pre-filtration** eliminates particles at 5.0µm or larger to an efficiency of 92% as defined in BS EN ISO 779.

**HEPA filtration (H14 Standard)** eliminates particles 0.3 microns or greater to an efficiency of 99.997% providing ultra-clean particle free Class 5 BS EN ISO 14644-1:1999 air conditions.

## MORE ABOUT BIGNEAT

Bigneat has been designing, manufacturing and maintaining just about every conceivable style of clean air cabinet for more than 35 years. Bigneat has grown from a national business to become a company with links worldwide and now enjoys an unrivalled reputation as the world's most innovative supplier in this specialist sector.

In addition to UV SC & UV PCR Cabinets, Bigneat manufactures ductless fume cabinets, fume & dust arm extraction systems, biological safety cabinets, chemical storage systems, controlled environment enclosures & gloveboxes, laminar flow cabinets, powder weighing cabinets and laboratory automation & robotics system enclosures.

## TECHNICAL SPECIFICATIONS

Model	Description	External dims mm (WxDxH)	Internal dims mm (WxDxH)
BC UV SC	UV Sterilisation Cabinet, supplied with UV and lighting lamps.	802 x 549 x 863	730 x 489 x 699
BW UV PCR	PCR Workstation, supplied with UV and lighting	802 x 549 x 998	730 x 489 x 699

Cabinets available for power supply: 230V, AC, 50Hz, 5Amp, 1Ø and 110V, AC, 60Hz, 8Amp, 1Ø. PCR is covered by U.S patents owned by Hoffmann-La Roche Inc.

## STATIC OR MOBILE BENCH

To make your cabinet truly portable, either select a mobile bench with integrated cupboard or an open box section bench. Alternatively a static stand with levelling/adjustable feet may be selected (an adjustable height electronic model is available).



## TECHNICAL SPECIFICATIONS

Model	Description
MTC 800	Mobile Bench robust epoxy coated pressed steel construction, cupboard doors with magnetic catches and lockable 130mm castors.

Stand prefix is MT for box section stand, MTA for electronic adjustable height stand.

## QUALITY ASSURED



Bigneat is accredited to BS EN ISO 9001: 2008



Bigneat systems are CE marked

Bigneat manufactures from UL approved components

Bigneat Limited

4 & 5 Piper's Wood Industrial Park, Waterberry Drive, Waterlooville, Hampshire PO7 7XU UK

t: +44 (0)23 92 266400 f: +44 (0)23 92 263373 e: info@bigneat.com w: www.bigneat.com

