



UV STERILISATION & PCR WORKSTATION

**WORK
SAFELY
WITH
BIGNEAT**



HIGH QUALITY DESIGN, COMPONENTS & MATERIALS

STYLED TO COMPLEMENT YOUR EXISTING LABORATORY EQUIPMENT

**MANUFACTURED AND SUPPORTED BY THE UK'S LEADING
HAZARD CONTAINMENT & STERILE AIR SPECIALIST**

INTRODUCTION

When undertaking PCR reactions it is important to protect against contamination by DNA from any source. The cabinet, reagents and equipment must be thoroughly decontaminated prior to a PCR process.

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 PCR Workstation. The 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 brought into the otherwise sterile environment. A positive pressure ensures that there is no ingress of airborne contaminants from the surrounding laboratory environment.

FEATURES OF UV STERILISATION CABINET

- Manufactured from the highest quality materials, which are highly resistant to corrosion and easy to clean.
- Powerful UV tube lights are combined with carefully located optical reflectors to ensure uniform intensity distribution of the UV radiation throughout the cabinet.
- Acrylic windows offer exceptionally clear all round vision, and do not allow transmission of UV.
- 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.
- 15W white lights, operated from an external switch, illuminate cabinet interior.
- Side panels include ports for cable access.

MATERIALS OF CONSTRUCTION

Fan housing and shelving: epoxy coated steel.

Support structure: anodised aluminium.

Windows: 10 mm thick acrylic.

Base tray: PVC.



FEATURES OF PCR WORKSTATION

- All the features of the UV Sterilising Cabinet.
- PLUS**
- Filtration system delivers air to Class 100 quality.
- Auto speed increase on door opening maintains air velocity speed to 0.45 m/s at the workstation front. **SPECIAL BIGNEAT FEATURE**
- Electronic filter saturation indicator.
- Fan noise level better than 50 d(B)a.

FILTRATION

A HEPA filter system is used in this workstation:

Pre-filter has an efficiency of 90% to EFV grade EU7.

HEPA filter has an efficiency 99.997% for particulates as small as 0.3µm.



TECHNICAL INFORMATION & SPECIFICATION

PART NO.	DESCRIPTION	DIMENSIONS (MM - EXTERNAL) WIDTH X DEPTH X HEIGHT	DIMENSIONS (MM - INTERNAL) WIDTH X DEPTH X HEIGHT
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 lamps. Pre-filter and HEPA filters included.	802 x 549 x 998	730 x 489 x 699

These cabinets require 230V/50 Hz electrical supply. Stand or mobile trolley available on request PCR® is covered by U.S. patents owned by Hoffmann-La Roche Inc.



BIGNEAT LIMITED
 4 & 5 Piper's Wood Industrial Park, Waterberry Drive, Waterlooville, Hampshire PO7 7XU U.K.
 Tel: +44 (0)23 92 266400 • Fax: +44 (0)23 92 263373 • E-mail: sales@bigneat.com

www.bigneat.com

