

# PBI Laboratory Gazette

DECEMBER 2008

PBI TECHNICAL BULLETIN

VOL. 15 ISSUE 190

## Hygiene Issue

### EFFICIENT STERILIZATION (cod. 35148)



The most known and effective method of sterilisation is by formaldehyde.

The earliest published use of formaldehyde as an antimicrobial dated to 1886 by Loew and Fisher. Subsequently it was promoted as a vapour phase fumigant to infected enclosures. Its later use has been extensive in a variety of applications, including hospitals, agriculture, egg incubators, cold sterilisation, toxin and vaccine inactivation, urinary tract infections.

The formaldehyde is a toxic gas that can be dangerous for the staff involved in its use. It is

therefore necessary to neutralise it by ammonia producing a harmless by-product. "Formalintec" produced by International Pbi is an automatic system that by heating first transform formaldehyde from the liquid state to the gas state and subsequently neutralises the formaldehyde by ammonia producing a harmless by-product. "Formalintec" is suitable for disinfection from 100 to 500 cubic meter environment, but it is possible to increase the volume up to 15.000 cubic metres.

### GERMREDUC (cod. 15335)



Today, the risk of infection and product contamination in the indoor environment is an important issue in different fields: hospitals, clinics, schools, laboratories, dental offices, food production, restaurants.

The continuous air flow bacteria reducer "GERMREDUC" produced by International PBI destroys the micro-organisms in the air by exposure to UV radiation.

Special features eliminate the UV exposure problems so that "Germreduc" can be used with staff present.

The system works with forced ventilation: air is aspirated from the room through a special filter to remove large particles, flows around the UV lamps to kill the germs and then is expelled back into the room.



### IS THE SURFACE CLEAN? (cod. 87883)



According to the Good Hygiene Practice, and HACCP method, the surfaces that are in contact with food should be daily monitored before to start the production activity. "Igitest" by International PBI is a ready to use test that detects in only ten minutes, without instruments, if the surface was

very well cleaned before to start the working shift. The method is based on the principle that a clean surface should not have protein residuals. The use is quite simple: the swab is streaked on the surface to be checked and then introduced in its test tube that contains a reagent. After ten minutes a colour indicates the result: green means clean, gray still acceptable, violet dirty.

### LABORATORY WASTE NEUTRALIZATION (cod. 15338)



All infected material that is eliminated in the microbiological laboratory should be autoclaved before to be outside delivered. Specific autoclavable plastic bags should be used for this purpose to guarantee the staff health.

The "Sterilbag Indicator" bag from international pbi are suitable for autoclave sterilization up to 134°C.

Each bag has the instructions printed on it and a chemical indicator strip alerts the operator on the correct sterilization completed cycle.

## “Formalintec II” Aerosol Atomiser

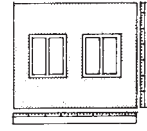


for formaldehyde disinfection/sterilisation treatment and automatic neutralisation of residual disinfectant - stainless steel construction, mounted on wheels for easy

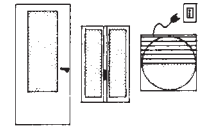
relocation - separate tanks for ammonia and formaldehyde - tank level warning light - timer for setting length of formaldehyde treatment - separate pushbutton controls for either tank's thermostat - supplied with funnels for filling and lifting handle.

**Code 35148** for disinfecting environments of 100 to 2500 m<sup>3</sup> and sterilising environments of 10 to 250 m<sup>3</sup> - power supply: 220 V, 50 Hz.

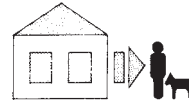
**Code 88892** for disinfecting environments of 500 to 5000 m<sup>3</sup> and sterilising environments of 10 to 500 m<sup>3</sup> - power supply: 220 V, 50 Hz.



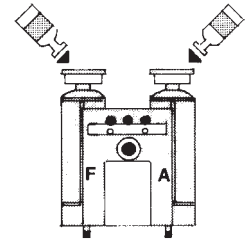
**1** Calculate the total volume



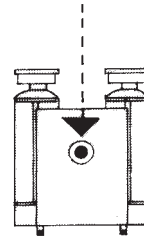
**2** Close doors and windows



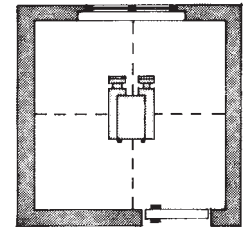
**3** Move staff and animals out of room



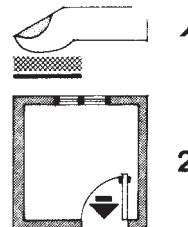
**4** Fill formaldehyde and ammonia tanks



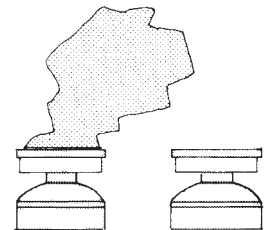
**5** Program the timer



**6** Put the unit in the centre of the room



**7** Push the start switch and leave the room



**8** Formaldehyde will disinfect the room and the ammonia will neutralize the formaldehyde

## WHAT TO ORDER

CODE	DESCRIPTION	PACKAGING
35148	“Formalintec II” aerosol atomiser - overall dim.: 450x200x500 h mm - weight 9.5 kg - 1000 W	1/box
88892	“Formalintec II” aerosol atomiser - overall dim.: 580x220x500 h mm - weight 12 kg - 1500 W	1/box