## UL, WB Технические характеристики

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## **Analogue Ultrasonic Cleaning Baths**



- Tank and housing all stainless steel
- Integral heater with dial setting and separate on/off switch (except models U100 and U300); range ambient to +70°C
- Integral timer with dial setting from 0 to 15 minutes and separate on/off switch
- Integral side handles allow bath to be moved easily and safely
- Models U500H and U2500H have a built-in tank drain
- Supplied with stainless steel basket and ABS lid which can also be used as a drip tray when removing the basket

Catalogue no.		UL110-20	UL110-25	UL110-35	UL110-40	UL110-45	UL110-80
Model		U100	U100H	U300	U300H	U500H	U2500H
Capacity, maxim		1.75	1.75	2.75	2.75	5.0	28.0
worki	ing, litres	1.5	1.5	2.5	2.5	4.5	25.0
Peak output	W	35	35	35	35	100	400
Heater power	W	—	80	—	150	150	650
Timer		0 to 15 minutes	s — all models				
Bath dimensions	;						
Internal	W, mm	150 (180)	150 (180)	240 (270)	240 (270)	300 (330)	500 (550)
(Overall)	D, mm	140 (160)	140 (160)	140 (170)	140 (170)	150 (180)	300 (345)
	H, mm	100 (190)	100 (190)	100 (210)	100 (210)	150 (275)	200 (365)
Weight, empty	kg	3.2	3.2	4.2	4.2	8.5	17

#### **Analogue Ultrasonic Cleaning Baths**

With stainless steel tank and outer case, integral heater and timer where indicated, ABS lid and stainless steel basket. For 230V 50/60Hz single phase supplies.

UL110-20	Model U100, 1.75 litres, timer
UL110-25	Model U100H, 1.75 litres, timer/heater
UL110-35	Model U300, 2.75 litres, timer
UL110-40	Model U300H, 2.75 litres, timer/heater
UL110-45	Model U500H, 5.0 litres, timer/heater
UL110-80	Model U2500H, 28.0 litres, timer/heater

#### Note:

Items to be cleaned should not be allowed to rest on the bottom of the tank during operation. We recommend all items are cleaned within the stainless steel basket provided.







## **Ultrasonic Cleaners**

## **Digital Ultrasonic Cleaning Baths**



Specifications:-

- Stainless steel tank with rugged, industrial plastics housing ٠
- Tank capacities 2.50 to 25.00 litres ٠
- Combined frequency sweep and Leap-and-degas ultrasonics ensure ٠ superior cleaning activity and results
- ٠ Digital setting and readout of timer and heating

#### Heating range ambient +5°C to +70°C ۵

- Built-in SD Flash memory card slot enables storage and download of procedural records to the user's  $\mbox{PC}$
- Easily accessible tank drain included
- Supplied with stainless steel basket and tight-fitting, ABS lid

Catalogue No.		UL325-25	UL325-30	UL325-35	UL325-40	UL325-45	
Model		QS5	Q\$10	Q\$12	Q\$18	Q\$25	
Capacity,	litres	4.50	9.50	12.50	17.50	25.00	
Peak power,	W	100	200	200	300	400	
Heater	°C	Ambient +5 to +70	— all models				
Timer		0 to 99 minutes — a	all models				
Bath dimensions*	mm						
Internal	D	150 (267)	150 (267)	200 (366)	200 (366)	200 (366)	
(External)	L	300 (345)	500 (350)	295 (345)	330 (374)	500 (551)	
	W	150 (200)	150 (183)	245 (288)	300 (347)	300 (347)	
Weight	kg	5.6	8.5	10	13	17	

\*All dimensions are nominal. All tanks have radiused corners.

#### **Digital Ultrasonic Baths, Ultrawave**

As described. Supplied with tight-fitting ABS lid, stainless steel basket, SD memory card slot and drain. For 230V 50/60Hz single phase supplies. Supplied without SD memory card.

UL325-25	Model QS5
UL325-30	Model QS10
UL325-35	Model QS12
UL325-40	Model QS18
UL325-45	Model QS25

#### Note:

Items to be cleaned should not be allowed to rest on the bottom of the tank during operation. The use of an accessory basket is recommended to avoid this.





UL325-15

## Cub Laboratory Glassware Washing Machines

Underbench machines offering a choice of:

#### Washer only

#### Washer/Hot Air Dryer

- Compact size
- 10 standard programmes covering most chemical or biological washing applications
- Microprocessor controlled programming
- Membrane keypad and backlit, graphics LCD readout with clock, calendar, timer, temperature, programme or machine status outputs, alarm function and troubleshooting menu
- Drop-down door for easy loading
- Hot and cold water filling
- No special plumbing required
- Dispenser for liquid detergent
- Wash and rinse temperatures up to 95°C
- Built-in water softener
- Acid rinse and distilled/deionised water rinse facilities
- Front opening easy access door
- Separate RS232 serial ports for printer and PC connection if required

#### **Additional Features for Dryer Model**

- Drying by HEPA-filtered hot air
- Drying time/temperature selection
- Programme cycle times can be extended by up to 60 minutes each

### **Facilities**

**Ten standard programmes** are provided by the microprocessor controller, all individually designed and tested for specific chemical or biological washing applications. In addition a further 40 custom programmes may be defined by the operator, if required.

**Detergent.** Built-in dispensers for liquid detergent.

**Distilled/Deionised Water Rinse.** Built-in pump for non-pressurised (e.g. storage aspirator) distilled/deionised water rinse. Can also be operated on pressurised distilled/deionised water supplies.

**Neutralization/Acid Rinsing.** Built-in pump automatically injects required amount of solution directly into washing machine chamber.

Water softener: Regeneration takes places automatically, only needs periodic addition of salt.

**Hot Air Drying.** The integral, compact unit directs hot air either into the individual spigots of the jet rack used, or into the wash chamber when using baskets, trays and special purpose racks.

Cleaning concentrates for use in washing machines – see CL565 to CL615

## Installation and Services

Hot and cold water supplies are through flexible hoses. A separate distilled /deionised water inlet is provided. The emptying hose requires a discharge drain tube with inlet set from the floor minimum 320mm, maximum 800mm.

**Water pressure:** 1.5 to 5 bar for hot, cold and pressurised distilled. 0 to 0.5 bar for unpressurised distilled.

**Power requirements:** 230V 50Hz single phase, 30A, 2.8kW.

#### Dimensions

H x W x D, mm
610 x 520 x 490
845 x 600 x 645*
845 x 900 x 645*
85kg (120kg Dryer model)

\*The door extends a further 610mm when open.

#### Effective washing heights

With basket trays on two levels bottom level = 280mm, top level = 190mm With Jet racks on two levels bottom level = 240mm, top level = 205mm

With Jet rack on bottom level only = 460mm

#### Fittings

The washing machine is supplied empty and requires basket trays with spray arms or jet racks for operation. Please refer to WB218/WB220 for details.

#### continued on next page







WB210

### **Cub Washing Machines** continued

#### Glassware Washer, Cub

As described. Supplied empty without basket trays and spray arms that are required for operation. For 230V 50Hz single phase supplies, 30A. WB200-45 Washer

#### Glassware Washer/Dryer, Cub Extra

As described. With integral hot air drying unit. Supplied empty without basket trays and spray arms that are required for operation. For 230V 50Hz single phase supplies, 30A. WB210-50 Washer/Dryer

Note Orders for glassware washers can only be processed after completion of an installation check list detailing the user's water/electrical supply requirements. Please contact us for details.

#### **Standard Basket Trays**

With spray arms. Universal basket trays suitable for washing wide mouth vessels, beakers, petri dishes, evaporating basins etc. and for test tubes held vertically in accessory baskets. One each upper and lower level baskets are recommended for use in WB200/WB210.

WB218-10	Upper level tray
WB218-20	Lower level trav

let	Racks
Jet	nacka

Provide thorough internal washing of narrow necked vessels, volumetric flasks, medical flats, small cylinders etc. on two levels.

	For machines	Hollow spigots
WB220-30	WB200/WB205	68 each
WB220-35	WB210/WB215	68 each

### **Bottle/Tube Washers**

#### Baskets, Stainless steel mesh, wedge shape

For test tubes. For use on lower basket tray.

WB224-20 105mm high WB224-26 165mm high WB224-32 200mm high

#### Petri Dish Rack

Plastic coated stainless steel. For use on lower level only. For 38 dishes, from 70 to 100mm diameter. WB230-20 Petri dish rack

#### **Beaker/Bottle Support**

Supports up to 28 items. Two supports can be used on each of the upper and lower basket trays. WB232-10 Beaker/Bottle support

#### **Bottle Washer**

For rinsing the interior of bottles and other containers with neck diameters between 9.5 and 100mm and approximately 75mm minimum height. The spring loaded nozzle, when depressed by an inverted bottle, ejects jets of water. Waste water is dispersed through channels in the sloping distributor. The water flow ceases when the bottle is removed from the nozzle. Supplied with centre vertical nozzle, four-arm horizontal distributor, heavy base and 1 metre of hose.

WB450-10 Bottle washer

#### **Brushing Washer**

For cleaning the inside of small bottles, test tubes and similar glassware using an electrically driven brush. Comprising a quiet running motor with quick release chuck within an enamel painted aluminium housing. A transparent plastic shield extends over the rotating brush and stainless steel drip tray. Overall 270 x 630 x 255mm W x D x H. Weight 14kg. For 220-240V 50Hz single phase supplies. Without brushes.

WB500-10 Brushing washer









WB500 in use

### **Pipette/Burette Washers**

#### **Accessory Brushes**

For bottles and similar containers.

	Approximate capacity ml	-
WB504-20 WB504-30	100/125 200/250	

#### For test tubes

	Approximate diameter mm
WB506-10	6
WB506-20	10
WB506-30	13
WB506-40	16
WB506-45	19
WB506-55	25

#### **Pipette/Burette Washers**

Heavy duty polyethylene. Modular system, comprising a basket which holds the items to be cleaned and fits inside the soaking jar. After soaking the basket is transferred to the siphoning rinser which is connected to a mains water supply. The fill /drain siphoning cycle repeats automatically for as long as the rinsing water flows at the correct rate. Require a source of mains water and a suitable waste water drain. For pipettes and burettes up to 600mm long. Individual components must be ordered separately, as required.

WB610-14 Rinser 165 740   WB610-24 Jar 165 650   WB610-34 Basket 130 650		ltem	lnt. dia. mm	Ht. mm	
	WB610-14	Rinser	165	740	
WB610-34 Basket 130 650	WB610-24	Jar	165	650	
	WB610-34	Basket	130	650	

Burette Brushes etc. - see Brushes section.

Cleaning Baths - see Ultrasonics section.



WB610-14





WB610-24

WB610-34

## **Colour Coded Washbottles, Narrow Neck**

Azlon

#### Washbottles, Azlon traditional

Round, square shouldered bottle with swan neck jet and screw closure. Natural polyethylene with white closure. Supplied in packs of 5.

	Ref. WGF-	Cap. ml	
WB706-25	230P	250	
WB706-30	236P	500	

#### Washbottles, Azlon sloping shoulder

Round, sloping shoulder bottle with swan neck jet and screw closure. Natural polyethylene with white closure. Supplied in packs of 5.

	Ref. WGF-	Cap. ml
White closure		
WB726-25	330P	250
WB726-30	336P	500
WB726-40	240P	1000

### Washbottles, Azlon integral jet

Squared oval bottle with integrally moulded tube and removable jet tip. Natural polyethylene with scew closure. Registered design 974610. Supplied in packs of 5.

	Ref. BGF-	Cap. ml	
WB750-25	130P	250	
WB750-30	136P	500	

Quickfit Washbottles - see Quickfit section.







WB706

WB726

WB750

## Colour Coded and Printed Washbottles, Narrow Neck, continued

Azlon

#### Washbottles, Azlon, printed

Round, sloping shoulder bottle with swan neck jet and screw closure. Natural polyethylene with colour coded printing and cap. Supplied in packs of 5.

	Ref. WGF-	Cap. ml	Colour code
Printed "Distilled Water"			
WB818-25	600P	250	White
WB818-30	601P	500	White
Printed "Water"			
WB820-25	530P	250	White
WB820-30	536P	500	White
Printed "Acetone"			
WB822-25	531P	250	Red
WB822-30	537P	500	Red
Printed "Methanol"			
WB824-25	532P	250	Green
WB824-30	538P	500	Green
Printed "Isopropanol"			
WB826-25	533P	250	Blue
WB826-30	539P	500	Blue
Printed "IMS"			
WB828-25	534P	250	Yellow
WB828-30	540P	500	Yellow
Printed "Ethanol"			
WB830-25	535P	250	Orange
WB830-30	541P	500	Orange

## **Washbottle Carriers**

#### Bottle carriers, Azlon wire

Epoxy coated steel wire for carrying up to six bottles or washbottles.

	Ref. BGS-	For bottles max. dia.mm	
BT512-10	040	60	
BT512-20	042	74	

Drip trays - see BT595.







BT512 in use

## **Colour Coded and Printed Washbottles, Wide Neck**

Azlon

WB890-10

WB890-12

WB890-20

WB890-22

WB890-30

WB890-32

- Wide neck for easy, spill-free filling ٠
- Leakproof closure with swan-neck spout ٠

602PML

603PML

600PML

601PML

530PML

536PML

Printed "Distilled Water", white closure

Printed "Water", white closure

250

500

250

500

250

500

### Washbottles, wide neck Azlon

Round shape in flexible natural polyethylene (LDPE) with leak-proof colour coded closure and spout. Labelled versions also available as indicated. All bottles marked with SPI recycling codes on the base. Supplied in packs of 5.

#### Washbottles for flammable liquids and solvents, wide neck Azlon, printed

Round shape in flexible natural polyethylene (LDPE). With integral valve mechanism which automatically vents any volatile vapour, depressurising the bottle and eliminating potentially hazardous liquid "drip". Printed with a variety of multilingual solvent labels (English, French, German, Spanish) including a blank for customer use. The printing has been tested for solvent resistance and each label contains a selection of international hazard identification codes including GHS pictograms, NFPA diamonds, risk phrases and safety information. All bottles are marked with SPI recycling codes on the base. Printing and closure colours as indicated. Supplied in packs of 5.

	Ref. WGW-	Capacity ml		Ref. WGW-	Capacity ml	Colour code
			Printed "Ace	tone"		
Blue closure			WB950-10	531VTML	250	Red
WB875-10	234P	250	WB950-12	537VTML	500	Red
WB875-12	235P	500				
WB875-14	446P	1000	Printed "Isop	oropanol"		
			WB950-20	533VTML	250	Blue
Green closure			WB950-22	539VTML	500	Blue
NB875-26	233P	250				
WB875-28	239P	500	Printed "Met	hanol"		
WB875-30	447P	1000	WB950-30	532VTML	250	Green
			WB950-32	538VTML	500	Green
Red closure						0.00.
NB875-40	231P	250	Printed "Etha	anol"		
WB875-42	237P	500	WB950-40	535VTML	250	Orange
WB875-44	445P	1000	WB950-42	541VTML	500	Orange
White closure			Printed "IMS	"		
NB875-56	230P	250	WB950-50	534VTML	250	Yellow
NB875-58	236P	500	WB950-52	540VTML	500	Yellow
NB875-60	443P	1000				
			Blank			
fellow closure			WB950-90	001VTML	250	White
NB875-70	232P	250	WB950-92	002VTML	500	White
VB875-72	238P	500				
WB875-74	444P	1000				
Printed "Deion	ised Water", wh	ite closure		1		WB950 Venting system





### Colour Coded and Printed Washbottles, Wide Neck, continued

Azlon

## Washbottles, Integral Spout, Wide Neck, Printed

500ml capacity. Round shape in flexible natural polyethylene (LDPE) with integral delivery tube and spout and colour-coded, polypropylene closure. Printed with a variety of multilingual solvent labels with international hazard identification codes. All bottles are marked with SPI recycling codes on the base. Printing and closure colours as indicated. Supplied in packs of 5.

	Ref. WGW-	Label	Colour code
WB965-14	801P	Distilled Water	White
WB965-24	802P	Acetone	Red
WB965-34	803P	Methanol	Green
WB965-44	804P	Isopropanol	Blue
WB965-54	805P	Ethanol	Orange

#### Washbottles, Tracker, Wide Neck

Round shape in flexible natural polyethylene (LDPE) pre-printed with labelling areas for bottle contents, originator, preparation date, first use and expiry dates, lot number and COSHH hazard data symbol position. Vented, with 250ml or 500ml versions available. Supplied with a pack of self-adhesive hazard warning labels. Information is easily inscribed using accessory solvent-based marker pens. Supplied in packs of 5.

 -

#### Ink Markers, Laboratory

Ideal for marking polystyrene petri dishes, metal, glass and most plastics, cold (above  $0^{\circ}$ C) or moist surfaces. Water and alcohol resistant, autoclavable ink. Can be removed from non-porous surfaces by scrubbing with detergent. Colours as indicated. Supplied singly.

LA620-04 Black LA620-08 Red LA620-12 Blue

LA620-16 Green

#### Washbottles, LDPE, Bleach, Wide Neck

Wide neck, round shape, opaque white LDPE washbottles for light-sensitive sodium hypochlorite (bleach) with multilingual labelling in English, French and Spanish, GHS symbols, NFPA diamond, risk phrases and safety information and one-piece, yellow PP dispensing closures. Supplied in a pack of 5.

Note: for dispensing only, not suitable for storage. WB979-10 WGW401PML

#### Washbottles, Polypropylene, Wide Neck

Round shape, wide neck, 500ml washbottles in translucent polypropylene, printed with multilingual (English, French, German and Spanish) solvent labels and international identification codes including GHS pictograms, NFPA diamonds, risk phrases and safety information. Fitted with unvented polypropylene dispensing closures in colours as indicated. Supplied in packs of 5. Note: these bottles are not autoclavable.

	Ref. WGW-	Label	Closure colour
WB982-15		Dichloromethane	White
WB982-25		Methyl Ethyl Ketone	Green

#### Washbottles, Polypropylene, Autoclavable

Round shape, 500ml washbottles in translucent polypropylene, autoclavable\* at 121°C. Fitted with white, unvented polypropylene dispensing closures and labelled "Autoclavable". Supplied in packs of 5.

#### WB984-10 WGW700PP

\*Note: bottles should be autoclaved empty or only if containing non-flammable and/or nonhazardous solutions. Always loosen or remove the cap to prevent implosion.



#### WB982-25, WB982-15 is similar





WB975





WB979



WB984

### Spray Bottles, LaboPlast®



#### Pressurised

Capacity 1500ml. Robust, industrial quality, pressurised spray bottle for use in varied applications including visualisation of colourless components on TLC plates, cleaning, disinfection or plant protection. In use, a hand pump pressurises the container up to 4 bar and the spray can then be activated by a separate push button. Materials in contact with the sprayed solution are polypropylene, high density polyethylene, fibre-glass reinforced polyamide, stainless steel and fluorocarbon rubber.

An accessory, 300mm long, extension lance allows precise spraying into restricted spaces or the operator to remain further away from the spray area. Supplied singly.

WB988-10 Spray bottle WB988-17 Accessory 300mm extension lance for WB988-10

#### **Trigger-action**

LDPE bottle and PP, trigger-action spray head with adjustable nozzle and stainless steel ball valve. Each stroke dispenses approximately 1.2ml. Supplied singly.

	Bottle Cap. ml	Overall height mm
BS835-42	250	220
BS835-50	500	240
BS835-82	1000	295



WB988-10 in use with WB988-17

BS835

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