



Registered in England number 4514202

Wherever in the world quality matters



Tableware Testing Equipment

Overview

Tableware testing requires a wide range of equipment but in many cases, there are common instruments for different tests. Here we have listed the equipment that is required to perform each test, with some items repeated. We can supply individual items or complete sets for each test. Whatever you need is available many items will be found on our web site or alternatively simply ask for what you need

Thermal Shock BS EN 1183:1997

Equipment required for method A (Complete Kit Code TWTSA)

Boiling Water Bath suitable to heat to 98C +/- 2C fitted with a lid and Polystyrene insulation balls and constant level device

Cold water bath (60 litres) 450 (l) x 450 (w) x 445 (h) mm, Bath fitted with a stainless steel basket to make handling the ware easier

Where necessary (high ambient temperatures in lab or incoming cold water) a refrigerated water chiller having the following features: -

Extraction rate	500 kcal/h
Incoming water temperature	20°C
Chilled water temperature	15°C (at point of control) plus or minus 2°C
Water flow	100 litres/hr.
Ambient temperature	35°C max 10°C min
Electrical Supply:	230V 50Hz 1ph neutral + earth.
Control Equipment:	Temperature gauge, Control thermostat, Liquid line refrigerant

filter/drier, Capillary expansion system, Freeze stat.

100gm of Methylene Blue

1 pair of strong tongs to handle hot ware

1 pr of long rubber gloves

1 rubber Apron 1200mm





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Equipment required for method B (Complete Kit Code TWTSB)

The hot water bath is replaced by a suitably sized oven which can reach 300C fitted with a fan and a controller suitable to maintain temperature +/- 5C. PID controller

Cold water bath fitted with a stainless steel basket to make handling the ware easier Where necessary (high ambient temperatures in lab or incoming cold water) a refrigerated water chiller

- 100gm of Methylene Blue
- 1 pair of strong tongs to handle hot ware
- 1 pr of long rubber gloves
- 1 rubber Apron 1200mm

Hand washing (Complete Kit Code TWHW)

Detergent, (usually Teepol L) a sink with drain rack, a sponge or dish cloth, rubber gloves, Digital thermometer fitted with penetration probe selection of plastic measuring cylinders 100ml, 250ml and 500ml Stainless Steel Water Boiler 30 litres fitted with tap (e.g. Burco)

Lid Fit/Pouring/Stability (Complete Kit Code TWLPS)

An inclined plane calibrated at 5° intervals between horizontal and vertical Strong Rubber bands for securing test piece Soft surface to catch falling ware (rubber or sponge pad) Spirit level, Engineers Ruler 30cm, Protractor Stop Watch





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Water Retention (Complete Kit Code TWWR)

Tray to hold article Stainless Steel 450 x 350 x 50 mm White absorbent test paper (Benchcote) 460mm wide x50m Stiff water resistance material to act as a lid Stop watch.

Knob and handle Temperature Test (Complete Kit Code TWKT)

Stainless Steel Water Boiler 30litre fitted with tap Digital Thermometer fitted with Heavy duty Surface probe

Resistance to Freezer to oven /microwave (Complete Kit Code TWFOM)

Freezer able to hold temperature at -5C or lower

Oven to 300C +/- 10C

Microwave

Stainless steel, standard microwave with 27L capacity. programmable with 6 power levels with touch control. 900w microwave,

Translucency (Complete Kit Code TWTR/1)

Translucency light box (Method 1)

Translucency box made to Ceram Pattern. Timber construction with light source and on off switch. Product supplied with pack of self-adhesive mastic complied with standard.

EEL M57 Haze Meter (Method 2) for Australian Standard (Complete Kit Code TWTR/2)





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Craze Resistance (Complete Kit Code TWCR)

BS EN 13258:2003 & BS EN 4034:1990 Autoclave with operating pressure of 10Bar 100gm Methylene Blue Heat Resistant Safety Gloves **Rubber Gloves** Rubber Apron Water Absorption (Complete Kit Code TWWA) Oven to 300C +/- 10C (same oven as for thermal shock test) Large Vacuum Desiccator Vacuum Pump Vacuum Gauge 2 litres Distilled water reservoir Associated pipework 1 litre Stainless Steel Beaker Hotplate 450°C Electronic Balance, 210gx 0.001g, Smooth Cotton Cloth

Impact Resistance and Handle Strength (IMP)

BS EN 12980 & ASTM

Anderen Impact Tester with adapter to allow edge tests and centre test to be performed

A Dual Scale, provided with the supply of both a 4oz and 6oz tup (impact head), allows the unit to be applied to both china and stronger bodies and hotel ware.





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Dishwasher Test TWDW

BS EN 12875-4:2006

Floor mounted insulated tank, and supplied with 3 or 6 separate ware containers for containing detergent solution

Each container is fitted with a ware rack

Tank is heated with 3 kw (3 place) or 2 x 3kw (6 place) immersion heater and supplemented by a circulator. Temperature is controlled to $77^{\circ}C$ +/- 1 ° Fitted with digital thermometer and automatic water level device.

Digital Thermometer fitted with water probe

30cm Engineers Ruler

Viewing Cabinet incorporating a fluorescent daylight illumination tube (6500° K) giving typical level of illumination of 700 – 3000 lm/m². Fitted with D65 and D652 Light source (complies with BS950)

Linen Cloth

Detergent to IEC436 specification 5 kg supplied separately

Metal Marking/ Surface abrasion AAT

Abrasion tester fitted with cycle counter and adjustable loads

Metal abrasion heads on to which can be stuck abrasive pads

Adapter to take a standard cutlery (knives)

Adapter with 3 standard pins (Martensitic, Ferritic, Austenitic)

Heavy Metal Release Test for Lead and Cadmium TWMR

California Prop 65, Massachusetts Protocol

GFAAS Instrument with lamps for Lead and for Cadmium (better to use single lamps than dual)

For Leaching room

Covers for ware,

Thermohygrogaph, Daily/Weekly Recording, 20 to 80%Rh, 50°C Span From -10°C To 50°C

Analytical Grade Acetic Acid (sourced locally)

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