

ECON Water Test Kits



Simple to use. Economical.
Water Testing Made Easy.



Make maintenance decisions fast with Kittiwake's complete range of ECON water testing equipment.

The Kittiwake ECON range is ideal for routine water monitoring and control. Choose from a range of equipment and parameters to use individually or combine into a single test kit. The ECON range gives a complete set of economically priced equipment, with a level of accuracy suited to routine analysis. Kits can be complemented by the Kittiwake range of ECON test meters if required (see additional data sheets for further details).



ECON Cases and Foams

Kittiwake ECON tests and equipment can be supplied as individual test kits or as part of a larger, multi-parameter kit. Simply select and combine tests from our extensive range to suit your needs.

Aluminium Cases

Standard test kit cases are available that will accommodate a number of ECON test packs, providing a portable, bespoke laboratory of your own specification. Aluminium cases are extremely hard wearing, and hold up to 54 different test reagents, test meters and equipment. Pre-cut foam inserts hold all items securely in place, which can be mixed and matched according your requirements.

Plastic Cases

Plastic cases are constructed of rugged ABS plastic, with pre-cut foam inserts to hold all items securely in place. Standard cases contain basic test equipment, along with additional space for a number of test meters, equipment and reagents.



ECON Comparator

Fast and accurate water analysis for a wide range of key industrial, environmental and commercial applications. The ECON comparator is a self-contained portable water analysis system, offering excellent accuracy, durability and compatibility. This unique design takes the disc/comparator concept to a new level.

Multi-range testing is achieved by increasing the path length using the supplied adaptors, which are stored in the rear of the comparator. Unique features include left or right handed operation and shaped test cells, which cannot be incorrectly inserted. Photometer grade sachet and liquid reagents give highly accurate results. "The comparator discs have continuous gradients, allowing for fine differentiation between colour intensities, improving resolution.



- Multi-range testing with the same disc; economical and easy to use.
- Housed in a robust plastic case, with a built in tray for easy testing.
- Uni-directional cells ensure correct operation every time.
- ECON Comparator Reagent Packs contain a full set of reagents, that when combined with the Comparator Disc, can be added to any of our ECON test kit cases.

Ordering Information

BI-K27264: ECON Comparator Unit
AS-K28231-KW: Comparator Cells (pk 10)

ECON B Test Kit Case: FG-28234-KW

Medium black plastic case containing:
 1 x ECON Comparator
 2 x path length adaptors
 2 x comparator cells
 1 x crushing rod
 1 x instruction booklet
 Holds 4 x 30 ml and 5 x 65 ml reagent bottles (or 10 pots), plus 2 pots and up to 3 disks and 1 ECON test meter.

ECON D Test Kit Case: FG-K28236-KW

Aluminium case containing:
 1 x ECON Comparator
 2 x path length adaptors
 2 x comparator cells
 1 x crushing rod
 1 x instruction booklet
 Holds up to 29 reagents, 10 disks and 2 ECON test meters.

ECON Kit	Reagent Pack	Disk	Description	Range	65ml Reagent	30ml Reagent	Reagent Pot
FG-K28200-KW	AS-K28005-KW	AS-K29005	Ammonia	0-3/0-1 ppm NH ₃ -N	2	0	1
FG-K28201-KW*	AS-K28011-KW*	AS-K29011*	Aluminium	0-0.5 ppm Al	1	1	2
FG-K28202-KW*	AS-K28017-KW*	AS-K29017*	Bardac 22	0-15 ppm	2	2	0
FG-K28203-KW	AS-K28023-KW	AS-K29023	Bromine	0-8.0/0-2.76 ppm Br ₂	0	0	2
FG-K28204-KW	AS-K28029-KW	AS-K29029	Bronopol	0-50 ppm	3	2	1
FG-K28205-KW	AS-K28035-KW	AS-K29035	Chloride	0-20/0-6.66 ppm Cl ⁻	2	0	0
FG-K28206-KW	AS-K28041-KW	AS-K29041	Chlorine LR (F&T)	0-3.5/0-1.17 ppm Cl ₂	0	0	2
FG-K28207-KW	AS-K28047-KW	AS-K29047	Chlorine HR (Total)	0-125/0-42 ppm Cl ₂	0	0	2
FG-K28208-KW	AS-K28053-KW	AS-K29053	Cyanuric acid	10-80 ppm	0	0	1
FG-K28209-KW	AS-K28059-KW	AS-K29059	Chlorine Dioxide	6.65/0-2.22 ppm ClO ₂	0	0	2
FG-K28247-KW	AS-K28246-KW	AS-K29173	Chromium	0-1.25/0-0.42 ppm Cr ⁶⁺	1	0	1
FG-K28210-KW	AS-K28065-KW	AS-K29065	Copper	0-5.0/0-1.66 ppm Cu	0	0	1
FG-K28211-KW	AS-K28071-KW	AS-K29071	DEHA	0-500/0-166 ppb	2	1	0
FG-K28212-KW	AS-K28077-KW	AS-K29077	Hydrazine	0-5/0-0.16 ppm N ₂ H ₄	2	0	0
FG-K28213-KW*	AS-K28083-KW*	AS-K29083*	Hydrogen Peroxide HR	0-100 ppm H ₂ O ₂	0	0	1
FG-K28214-KW	AS-K28089-KW	AS-K29089	Iron LR	0-3.0/0-1.0 ppm Fe	0	0	1
FG-K28215-KW	AS-K28095-KW	AS-K29095	Iron HR	0-10/0-3.33 ppm Fe	2	0	0
FG-K28251-KW	AS-K28175-KW	AS-K29175	Iron LR (LPHW)	0-1.0/0-0.33 ppm as Fe	2	0	0
FG-K28216-KW*	AS-K28101-KW*	AS-K29101*	Isothiazolinone	0-7.5 ppm	3	2	0
FG-K28217-KW	AS-K28107-KW	AS-K29107	Nitrite	0-1.0/0-0.33 ppm NaNO ₂	1	0	1
FG-K28218-KW	AS-K28113-KW	AS-K29113	Nitrate	0-80/0-26.7 ppm NO ₃	1	0	1
FG-K28219-KW	AS-K28119-KW	AS-K29119	Manganese	0-5.0/0-1.66 ppm Mn	3	0	0
FG-K28220-KW	AS-K28125-KW	AS-K29125	Molybdate HR	0-70/0-23.3 ppm MoO ₄	0	0	3
FG-K28221-KW	AS-K28131-KW	AS-K29131	Ozone	0-2.33/0-0.78 ppm O ₃	0	0	2
FG-K28222-KW	AS-K28137-KW	AS-K29137	pH (phenol red)	pH 6.5-8.5	2	0	0
FG-K28223-KW	AS-K28143-KW	AS-K29143	Potassium	1-6 ppm K	0	0	1
FG-K28224-KW	AS-K28149-KW	AS-K29149	Phosphate LR	0-2.5/0-8.33 ppm PO ₄	0	0	1
FG-K28225-KW	AS-K28155-KW	AS-K29155	Phosphate HR	10-100/0-33.3 ppm PO ₄	3	0	1
FG-K28226-KW*	AS-K28161-KW*	AS-K29161*	Silica LR	0-1.0/0-0.33 ppm SiO ₂	3	0	1
FG-K28227-KW	AS-K28167-KW	AS-K29167	Silica HR	0-80/0-26.6 ppm SiO ₂	0	0	3
FG-K28250-KW	AS-K28179-KW	AS-K29179	Tannin	0-20 ppm Tannic Acid	2	0	0

* Available as a special item only - Quantity dependant. Please contact Kittiwake for more details

ECON Test Strips



Kittiwake's range of test strips enable rapid on-site evaluation of key industrial chemicals, products and systems. Test strips are supplied in bottles of 50 or 100 strips or in 5M reels. Fast, convenient water analysis can be achieved by either qualitative or semi-quantitative testing procedures.

Qualitative Testing (Q)

A colour change on the strip after dipping the strip into the sample indicates the presence or absence of the chemical you are testing for.

Semi-Quantitative Testing (SQ)

A scale that accompanies the test strips shows the approximate analyte concentration. The more intense the colour change the higher the concentration.

- Easy to use with rapid results, test strips offer an economical and simple test method.
- Wide test range, suitable for a range of applications and test parameters.
- Colour fast pads ensure crisp colours, with no bleeding.
- Test Strips are available in either bottle packs or test reels.
- Ideal for swimming pool and spa testing such as routine spot checking of disinfectant levels.



Q – Qualitative (presence/absence)

SQ – Semi-quantitative (graduated colour scale)

Code	Product	Range	Resolution/Graduations	Tests per pack	Q	SQ
BI-K27011	Chlorine HR	0-200 ppm Cl ₂	0,50,100,150,200	100		■
BI-K21321	Starch Iodide	-	Presence absence	100	■	
BI-K21322	Starch Iodide Test Reels (5M)	-	Presence absence	100	■	
BI-K28228	Chlorine Dioxide LR	0-1.6 ppm ClO ₂	0,0.1,0.2,0.4,0.6,0.8,1,1.2,1.4,1.6	50		■
BI-K27106	Chlorine Dioxide HR	0-100 ppm ClO ₂	0, 0.5, 2, 5, 10, 25, 50, 100	50		■
BI-K21332	Copper	0-5 ppm Cu	0, 0.5, 1.0, 2.0, 5.0	25		■
BI-K21331	Iron	0-5 ppm Fe	0, 0.1, 0.3, 1.0, 5.0	25		■
BI-K21334	Hydrogen peroxide	0-100 ppm H ₂ O ₂	0-0.5-2.0-5.0-10-25-50-100	50		■
BI-K21333	Hardness	0-425 ppm Ca ² CO ₃	0,40,80,120,180,250,425	50		■
BI-K21308	pH Strips (pH4.5-10)	pH4.5-10	Steps of 0.3 pH	100		■
BI-K21309	pH Strips (pH7-14)	pH 7-14	Steps of 0.5 pH	100		■
BI-K21307	pH Strips (pH0-14)	pH 0-14	Steps of 1 pH	200		■
BI-K21310	pH Strips (paper)	pH 6.0-8.1	Steps of 0.2	200		■
BI-K21311	pH Strips (paper)	pH 9.5-12	Steps of 0.2	200		■
BI-K21312	pH Strips (paper)	pH 8.0-9.7	Steps of 0.2	100		■
BI-K25713	Peracetic Acid LR	0-50 ppm	0,5, 10, 20, 30, 50	100		■
BI-K25714	Peracetic Acid HR	0-500 ppm	0, 100, 200, 300, 400, 500	100		■
BI-K21305	Nitrate (NO ₃ ⁻) /Nitrite (NO ₂ ⁻)	0-500 ppm NO ₃ / 0-50 ppm NO ₂	0, 10,25,50,100,250,500 / 0, 1, 5, 10, 25, 50	100		■
BI-K21323	Sulphite (SO ₃)	0-1000 ppm SO ₃	0,10,25,50,100,250,500,1000			■

ECON Drop Test Kits

Dropper titration provides a cost effective and accurate means of determining water quality in the field, for a wide range of applications. Kittiwake provide an extensive range of tests based on this technology. Carefully chosen chemistries and easy to follow, pictorial instructions make drop tests simple to perform with accurate results.

All dropper titration tests are performed in a similar way. An indicator and sometimes a pH adjuster are added to the sample to generate a colour. A final reagent (titrant) is added one drop at a time until a colour change is observed. The number of drops added is multiplied by a factor on the instruction sheet to give the result of the test, usually as ppm (mg/l). ECON test packs contain instructions and test reagents and can be added to any ECON test kit case.



- Simple to use - tests can be easily performed by non-technical personnel, with minimum training.
- Carefully selected chemistries, with all drop test kits manufactured under strict ISO 9001:2000 quality procedures for excellent accuracy of results.
- Cost effective method of testing, with no expensive equipment necessary.
- Large range of test kits available.
- Individual test kits can be collated into a larger test kit for ease of use.

Ordering Information

BI-K21443:	Titration Jar
BI-K21414:	20ml Sampling Syringe
BI-K21422:	Crusher / Stirring Rod
AS-K22747:	Basic Instruction Booklet

ECON A Test Kit Case: FG-K28233-KW

Single parameter test kit.
Holds up to 3 reagents.

ECON C Test Kit Case: FG-K28235-KW

Medium black plastic case.
Holds 4 x 30 ml and 6 x 65 ml reagent bottles (or 12 pots), plus 2 pots and 1 ECON test meter.

ECON E Test Kit Case: FG-K28237-KW

Aluminium case.
Holds up to 29 reagents, plus 2 ECON test meters.

Part Number	Description	Range	65ml Reagent	30ml Reagent	Reagent Pot
AS-K28238-KW	Acidity (P)	0-7.5 % H ₂ SO ₄	1	1	0
AS-K22292-KW	Alkalinity (M) HR	200-2400 ppm CaCO ₃	2	0	0
AS-K22291-KW	Alkalinity (M) LR	50-600 ppm CaCO ₃	2	0	0
AS-K22295-KW	Alkalinity (P + M) LR	50-600 ppm CaCO ₃	3	0	0
AS-K22304-KW	Alkalinity (P + OH) HR	200-2400 ppm CaCO ₃	3	0	0
AS-K22294-KW	Alkalinity (P) HR	200-2400 ppm CaCO ₃	2	0	0
AS-K22303-KW	Alkalinity (P) HR	0.25-6.0 % NaOH	2	0	0
AS-K22293-KW	Alkalinity (P) LR	50-600 ppm CaCO ₃	2	0	0
AS-K22302-KW	Alkalinity (P) LR	250-6000 ppm NaOH	2	0	0
AS-K22298-KW	Alkalinity (P, M + OH) HR	200-2400 ppm CaCO ₃	4	0	0
AS-K22300-KW	Alkalinity (P, M + OH) LR + HR Pack	50-2400 ppm CaCO ₃	4	0	0
AS-K22296-KW	Alkalinity (P, M + OH) LR	50-600 ppm CaCO ₃	4	0	0
AS-K22312-KW	Chloride HR	200-12000 ppm Cl ⁻	2	0	0
AS-K22313-KW	Chloride LR + HR	20-12000 ppm Cl ⁻	3	0	0
AS-K22311-KW	Chloride LR	20-400 ppm Cl ⁻	2	0	0
AS-K22316-KW	Chlorine (Free) HR	15-300 ppm Cl ₂	2	0	0
AS-K22315-KW	Chlorine (Free) LR	1-30 ppm Cl ₂	2	0	0
AS-K28239-KW	Chlorine Spot tester	Trace Cl ₂	1	0	0
AS-K22144-KW	Chlorine (Semiquantitative)	0.1-50 ppm Cl ₂	0	0	1
AS-K22318-KW	Chlorine (Total Available) HR	0.2-15 % Cl ₂	1	0	3
AS-K22319-KW	Chlorine (Total Available) LR + HR	0.01-15 % Cl ₂	2	0	3
AS-K22317-KW	Chlorine (Total Available) LR	100-2400 ppm Cl ₂	1	0	3
AS-K22158-KW	Chlorine Dioxide	25-200 ppm ClO ₂	2	0	0
AS-K23586-KW	Chlorine Dioxide LR	0.08-30 ppm ClO ₂	2	0	0
AS-K28240-KW	EDTA (Free)	0-2000 ppm EDTA	3	0	0
AS-K22327-KW	Hardness (Calcium) HR	50-600 ppm CaCO ₃	2	0	1
AS-K22326-KW	Hardness (Calcium) LR	5-60 ppm CaCO ₃	2	0	1
AS-K22330-KW	Hardness (Total) LR + HR	5-600 ppm CaCO ₃	4	0	0
AS-K22329-KW	Hardness (Total) HR	50-600 ppm CaCO ₃	3	0	0

chart continued on next page

ECON Drop Test Kits - Continued

Part Number	Description	Range	65ml Reagent	30ml Reagent	Reagent Pot
AS-K22328-KW	Hardness (Total) LR	5-60 ppm CaCO ₃	1	3	0
AS-K22332-KW	Hardness (Total/Calcium) HR	50-600 ppm CaCO ₃	4	5	1
AS-K22336-KW	Hardness Raw Water	50-600 ppm CaCO ₃	0	1	0
AS-K22334-KW	Hardness Stop/Go	4 ppm CaCO ₃	0	1	0
AS-K23050-KW	Hardness Total/Calcium LR+HR	50-600 ppm CaCO ₃	5	6	1
AS-K22333-KW	Hardness Yes/No	8-20 ppm CaCO ₃	0	0	1
AS-K22340-KW	Hydrogen Peroxide HR	25-5000 ppm H ₂ O ₂	2	0	0
AS-K28241-KW	Iron Spot Tester	Trace Fe	2	0	0
AS-K23400-KW	Molybdate HR Pack	0-400 ppm MoO ₄	5	6	1
AS-K22341-KW	Molybdate LR Pack	2.5-20 ppm MoO ₄	3	5	2
AS-K22343-KW	Nitrite Drop	10-2000 ppm NaNO ₂	2	0	0
AS-K28242-KW	Oxygen (available)	0-500 ppm O ₂	2	3	1
AS-K28243-KW	Peracetic Acid	0-450 ppm PAA	1	3	2
AS-K22346-KW	Phosphonate	4-20 ppm H.E.D.P.	1	1	0
AS-K22348-KW	Phosphonate	4-20 ppm H.E.D.P.	4	1	0
AS-K22355-KW	Quaternary Ammonium Compounds HR	60-1800 ppm CTAB	3	0	0
AS-K22354-KW	Quaternary Ammonium Compounds LR	40-300 ppm CTAB	3	0	0
AS-K22356-KW	Sulphite	25-150 ppm Na ₂ SO ₃	1	2	1
AS-K22358-KW	Tannin	50-300 ppm Tannin	1	2	1
AS-K28244-KW	Total Chelant	0-2000ppm EDTA	2	3	0
AS-K22359-KW	Zinc (Free Soluble)	1-10 ppm Zn	2	3	1
AS-K22361-KW	Zinc (Total Complex) Pack	1-10 ppm Zn	4	5	1

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