Testing Item		Model	Range	Reaction Time
Ag	Silver	WAK-Ag	0, 0.5, 1, 2, ≥5 mg/L	3 min.
Al	Aluminum	WAK-Al	0, 0.05, 0.1, 0.2, 0.5, 1 mg/L	1 min.
Au	Gold	WAK-Au	0, 2, 5, 10, 20 mg/L	30 sec.
B(C)	Boron (High Range)	WAK-B(C)	0, 5, 10, 20, 50, 100 mg/L	10 min.
B	Boron	WAK-B	0, 0.5, 1, 2, 5, 10 mg/L	30 min.
Ca	Calcium	WAK-Ca	0, 2, 5, 10, 20, ≥50 mg/L	2 min.
	Calcium Hardness		0, 5, 12.5, 25, 50, ≥125 mg/L	
Cl(300)	Chloride (300)	WAK-Cl(300)	≤200, about 250, ≥300 mg/L	10 sec.
Cl(200)	Chloride (200)	WAK-Cl(200)	≤100, about 150, ≥200 mg/L	10 sec.
Cl(D)	Chloride (Low Range)	WAK-Cl(D)	0, 2, 5, 10, 20, ≥50 mg/L	1 min.
ClO(C)	Residual Chlorine (High Range)	WAK-ClO(C)	5, 10, 20, 30, 50, 100, 150, 200, 300, 600, ≥1000 mg/L	10 sec.
ClO·DP	Residual Chlorine (Free)	WAK-ClO·DP	0.1, 0.2, 0.4, 1, 2, 5 mg/L	10 sec.
T·ClO	Total Residual Chlorine	WAK-T·ClO	0.1, 0.2, 0.4, 1, 2, 5 mg/L	2 min.
ClO2	Chlorine Dioxide	WAK-ClO2	0.2, 0.4, 0.6, 1, 2, 5, 10 mg/L	10 sec.
NaClO2	Sodium Chlorite	WAK-NaClO2	5, 10, 20, 50, 100, 150, 200, 300, 500, ≥1000 mg/L	10 sec.
CN	Free Cyanide	WAK-CN	≤0.02, 0.05, 0.1, 0.2, 0.5, 1, 2 mg/L	10 min.

COD(H)	COD (High Range)	WAK-COD(H)	0, 30, 60, 120, 200, ≥250 mg/L	5 min.
COD	COD	WAK-COD	0, 5, 10, 13, 20, 50, 100 mg/L	5 min.
COD(D)	COD (Low Range)	WAK-COD(D)	0, 2, 4, 6, ≥8 mg/L	5 min.
Cr6+	Chromium (Hexavalent)	WAK-Cr6+	0.05, 0.1, 0.2, 0.5, 1, 2 mg/L	2 min.
Cr-T	Total Chromium	WAK-Cr-T	0.5, 1, 2, 5, 10, 20 mg/L	5.5 min.
CS	Cationic Surfactants	WAK-CS	0, 5, 10, 20, ≥50 mg/L	5 min.
Cu	Copper	WAK-Cu	0.5, 1, 2, 3, 5, ≥10 mg/L	1 min.
CuM	Copper (DDTC)	WAK-CuM	0.5, 1, 3, 5, 10 mg/L	2 min.
F	Fluoride (Free)	WAK-F	0, 0.4, 0.8, 1.5, 3, ≥8 mg/L	10 min.
Fe	Iron	WAK-Fe	0.2, 0.5, 1, 2, 5, 10 mg/L	2 min.
Fe(D)	Iron (Low Range)	WAK-Fe(D)	0.05, 0.1, 0.3, 0.5, 1, 2 mg/L	2 min.
Fe2+	Iron (Divalent)	WAK-Fe2+	0.2, 0.5, 1, 2, 5, 10 mg/L	30 sec.
Fe2+(D)	Iron (Divalent) (Low Range)	WAK-Fe2+(D)	0.1, 0.2, 0.5, 0.8, 1.2, 2.5 mg/L	30 sec.
FOR	Formaldehyde	WAK-FOR	0, 0.1, 0.2, 0.3, 0.5, 1, 2 mg/L	4 min.
H2O2(C)	Hydrogen Peroxide (High Range)	WAK-H2O2(C)	3, 7, 13, 20, 35, 70, 100, 130, 200, 400, 700 mg/L	20 sec.

H2O2	Hydrogen Peroxide	WAK-H2O2	0.05, 0.1, 0.2, 0.5, 1, 2, 5 mg/L	1 min.
HYD	Hydrazine	WAK-HYD	0.05, 0.1, 0.2, 0.5, 1, 2 mg/L	10 min.
Me	Metals (Cu, Zn, Mn, Ni, Cd)	WAK-Me	0, 0.2, 0.5, 1, 2, ≥5 mg/L	1 min.
Mg	Magnesium	WAK-Mg	0, 1, 2, 5, 10, 20 mg/L	1 min.
	Magnesium Hardness		0, 4.1, 8.2, 20.5, 41, 82 mg/L	
Mn	Manganese	WAK-Mn	0.5, 1, 2, 5, 10, 20 mg/L	30 sec.
Mo	Molybdenum	WAK-Mo	5, 10, 20, 50, 100, 200, 500 mg/L	1 min.
NH4(C)	Ammonium (High Range)	WAK-NH4(C)	0, 0.5, 1, 2, 5, 10, ≥20 mg/L	10 min.
	Ammonium-Nitrogen (High Range)		0, 0.5, 1, 2, 5, 10, ≥20 mg/L	
NH4	Ammonium	WAK-NH4	0.2, 0.5, 1, 2, 5, 10 mg/L	5 min.
	Ammonium-Nitrogen		0.2, 0.5, 1, 2, 5, 10 mg/L	
Ni	Nickel	WAK-Ni	0.5, 1, 2, 5, 10 mg/L	2 min.
Ni(D)	Nickel (DPM)	WAK-Ni(D)	0.3, 0.5, 1, 2, 5, 10 mg/L	2 min.
NO2(C)	Nitrite (High Range)	WAK-NO2(C)	16, 33, 66, 160, 330, ≥660 mg/L	5 min.
	Nitrite-Nitrogen (High Range)		5, 10, 20, 50, 100, ≥200 mg/L	

NO2	Nitrite	WAK-NO2	0.02, 0.05, 0.1, 0.2, 0.5, 1 mg/L	2 min.
	Nitrite-Nitrogen		0.005, 0.01, 0.02, 0.05, 0.1, 0.2, 0.5 mg/L	
NO3(C)	Nitrate (High Range)	WAK-NO3(C)	90, 225, 450, 900, 2250, 4500 mg/L	5 min.
	Nitrate-Nitrogen (High Range)		20, 50, 100, 200, 500, 1000 mg/L	
NO3	Nitrate	WAK-NO3	1, 2, 5, 10, 20, 45 mg/L	3 min.
	Nitrate-Nitrogen		0.2, 0.5, 1, 2, 5, 10 mg/L	
O3	Ozone	WAK-O3	0.1, 0.2, 0.5, 1, 2, 5 mg/L	1 min.
Pd	Palladium	WAK-Pd	1, 2, 5, 10, 20, 30, 50 mg/L	1 min.
pH	pH	WAK-pH	pH 5.0 — 9.5 0.5 increment 10 step	20 sec.
TBL	pH-TBL	WAK-TBL	pH 1.6 — 3.4 0.2 increment 10 step	20 sec.
BCG	pH-BCG	WAK-BCG	pH 3.6 — 6.2 0.2 increment 14 step	20 sec.
BTB	pH-BTB	WAK-BTB	pH 5.8 — ≥8.0 0.2 increment 12 step	20 sec.
PR	pH-PR	WAK-PR	pH ≤6.2 – ≥8.8 12step	20 sec.
TBH	pH-TBH	WAK-TBH	pH 8.2 — 9.6 0.2 increment 7 step	20 sec.
ANC	pH-Anthocyanin	ZAK-ANC *	pH 2 — 13 1 increment 12 step	1 min.
PNL	Phenol	WAK-PNL	0, 0.2, 0.5, 1, 2, 5, 10 mg/L	8 min.

PO4(C)	Phosphate (High Range)	WAK-PO4(C)	2, 5, 10, 20, 50, 100 mg/L	1 min.
	Phosphate-Phosphorus (High Range)		0.66, 1.65, 3.3, 6.6, 16.5, 33 mg/L	
PO4	Phosphate	WAK-PO4	0.2, 0.5, 1, 2, 5, 10 mg/L	1 min.
	Phosphate-Phosphorus		0.1, 0.2, 0.5, 1, 2, 5 mg/L	
PO4(D)	Phosphate (Low Range)	WAK-PO4(D)	0.05, 0.1, 0.2, 0.5, 1, 2 mg/L	5 min.
	Phosphate-Phosphorus (Low Range)		0.02, 0.05, 0.1, 0.2, 0.5, 1 mg/L	
PP	Polyphenol	ZAK-PP *	0.2, 0.5, 1, 1.5, 2 mg/100mL	3 min.
RC	Tannin in Green Tea	ZAK-RC *	1, 2, 5, 10, ≥20 mg/100mL	1 min.
S	Sulfide (Hydrogen Sulfide)	WAK-S	0.1, 0.2, 0.5, 1, 2, 5 mg/L	3 min.
SiO2	Silica	WAK-SiO2	5, 10, 20, 50, 100, 200 mg/L	6.5 min.
SiO2(D)	Silica (Low Range)	WAK-SiO2(D)	0.5, 1, 2, 5, 10, 20 mg/L	6.5 min.
SO3(C)	Sulfite (High Range)	WAK-SO3(C)	50, 100, 200, 500, 1000, 2000 mg/L	10 sec.
TH	Total Hardness	WAK-TH	0, 10, 20, 50, 100, 200 mg/L	30 sec.

TN-i	Total Nitrogen (Inorganic)	WAK-TN-i	0, 5, 10, 25, 50, 100 mg/L	20 min.
VC	L-Ascorbic Acid	WAK-VC	1, 2, 5, 10, 20, 50, 100 mg/L	3 min.
Zn	Zinc	WAK-Zn	0, 0.2, 0.5, 1, 2, ≥5 mg/L	1 min.
Zn(D)	Zinc (Low Range)	WAK-Zn(D)	0, 0.05, 0.1, 0.2, 0.5, 1, ≥2 mg/L	6 min.

* Model code starting ZAK- only available in 10 Test Package.

Pretreatment Reagent

Product Name	Model	Quantity (pcs./box)	Note
Pretreatment Reagent for Total Chromium	Cr-RA	about 100 tests	Required to measure Total Chromium using PACKTEST Chromium (Hexavalent).
Pretreatment Reagent for Nitrate	NO3-RA	50 tests	Required when Nitrite co-exists in the sample while using PACKTEST Nitrate for measurement.
Diluted Sulfuric Acid	WAS-D-SO4	20mL	To neutralize the sample when necessary, and for acid treatment upon measuring the metal ions.

UV Reactor Set : Metal Complex Decomposition	UVR-Me	50 tests	Required when employing the UV Reactor L to decompose metal prior to use PACKTEST.