

WATER INSPECTION TEST

# PACK TEST

ION SELECTIVE

Anyone can use it anywhere

Chemical reagent enough for each one-time test is packed in a small polyethylene tube.  
Remove the line from the tube and suck up the water sample into the tube.



**Fast**

Almost all reaction times ranging from 10 sec to 5 min



**Instruments are unnecessary**

Ready to use



**Small and light**

About 1 gram per a piece



**Sturdy**

Made of soft Polyethylene



Size of the original

"PACK TEST" is the most simplified water quality test.

"PACK TEST" are available for 56 ions or molecules.

KYORITSU CHEMICAL-CHECK Lab., Corp.

# Testing Items and Range

Order Code No.	Model (WAK)	Testing Item	Range (mg/L)							Reaction Time	Quantity (pcs./box)	Applications				
60022	-Ag	Silver	0	0.5	1	2	≥5		3 min.	50	Process management Waste water management					
60018	-Al	Aluminum	0	0.05	0.1	0.2	0.5	1	1 min.	40	Process management Research					
60029	-As	Arsenic	0.2	0.5	1	2	5	10	2 min.	40	Process management Waste water management					
60033	-Au	Gold	0	2	5	10	20		30 sec.	40	Process management Waste water management					
60035	-B	Boron	0	0.5	1	2	5	10	30 min.	50	Waste water check Environmental research					
60036	-Ca	Calcium	0	2	5	10	20	≥50	2 min.	50	Drinking water check Environmental research					
		Calcium Hardness	0	5	12.5	25	50	≥125								
60047	-Cl(300)	Chloride (300)	≤200		about 250		≥300		10 sec.	40	Process management					
60049	-Cl(200)	Chloride (200)	≤100		about 150		≥200		10 sec.	40	Drinking water check Process management					
60044	-Cl(D)	Chloride (Low range)	0	2	5	10	20	≥50	1 min.	40	Drinking water check Process management Environmental research					
60042	-ClO(C)	Residual Chlorine (High range)	5	10	20	30	50	100	150	200	300	600	≥1000	10 sec.	50	Residue check Process management
60030	-ClO·DP	Residual Chlorine (Free)	0.1	0.2	0.4	1	2	5		10 sec.	50	Swimming-pool water check Drinking water check				
60048	-T·ClO	Total Residual Chlorine	0.1	0.2	0.4	1	2	5		2 min.	50	Tap water check Swimming pool water check				
60063	-ClO <sub>2</sub>	Chlorine Dioxide	0.2	0.4	0.6	1	2	5	10	10 sec.	40	Tap water check Swimming pool water check				
60009	-CN	Free Cyanide	0.02	0.05	0.1	0.2	0.5	1	2	5 min.	40	Waste water management Poison detection				
★ 60038	-COD(H)	Chemical Oxygen Demand (High range)	0	30	60	120	200	≥250		5 min.	50	Waste water management Environmental research				
★ 60010	-COD	Chemical Oxygen Demand	0	5	10	13	20	50	100	5 min.	50	Environmental research Waste water management				
★ 60026	-COD(D)	Chemical Oxygen Demand (Low range)	0	2	4	6	≥8		5 min.	50	Environmental research Drinking water check					
61000	-Cr <sup>6+</sup>	Chromium(Hexavalent)	0.05	0.1	0.2	0.5	1	2		1 min.	50	Waste water check Process management				
60062	-Cr·T	Total Chromium	0.5	1	2	5	10	20		5.5 min.	40	Waste water check Process management				
64000	-Cu	Copper	0.5	1	2	3	5	≥10		1 min.	50	Process management Waste water management				
60064	-Cu(DDTC)	Copper (DDTC)	0.5	1	3	5	10		2 min.	50	Process management Waste water management					
60014	-F	Fluoride (Free)	0	0.4	0.8	1.5	3	≥8		10 min.	50	Process management Waste water management				
60005	-Fe	Iron	0.2	0.5	1	2	5	10		2 min.	50	Drinking water management Process management				
60028	-Fe(D)	Iron (Low range)	0.05	0.1	0.3	0.5	1	2		2 min.	50	Drinking water management Process management				
60004	-Fe <sup>2+</sup>	Iron (Divalent)	0.2	0.5	1	2	5	10		30 sec.	50	Drinking water check Process management				
60027	-Fe <sup>2+</sup> (D)	Iron (Divalent) (Low range)	0.1	0.2	0.5	0.8	1.2	2.5		30 sec.	50	Drinking water management Process management				
60016	-FOR	Formaldehyde	0	0.1	0.2	0.3	0.5	1	2	4 min.	40	Process management Waste water management				
60054	-H <sub>2</sub> O <sub>2</sub> (C)	Hydrogen Peroxide (High range)	3	7	13	20	35	70	100	130	200	400	700	20 sec.	50	Process management
60040	-H <sub>2</sub> O <sub>2</sub>	Hydrogen Peroxide	0.02	0.1	0.2	0.5	1	5		1 min.	50	Residue check Food check				
60017	-HYD	Hydrazine	0.05	0.1	0.2	0.5	1	2		10 min.	40	Boiler Feed Water Process Management				
60025	-Mg	Magnesium	0.5	1	2	5	10	20		1 min.	50	Drinking water check Agricultural management				
		Magnesium Hardness	0	4.1	8.2	20.5	41	82								
60011	-Mn	Manganese	0.5	1	2	5	10	20		30 sec.	50	Drinking water check Process management				
60039	-NH <sub>4</sub> (C)	Ammonium (High range)	0	0.5	1	2	5	10	≥20	15 min.	50	Waste water management Environmental research				
		Ammonium-N (High range)	0	0.4	0.8	1.6	4	8	≥16							

★ The principle of COD measuring method is the oxidation by permanganate.

Order Code No.	Model (WAK)	Testing Item	Range (mg/L)						Reaction Time	Quantity (pcs./box)	Applications	
65000	-NH <sub>4</sub>	Ammonium	0.2	0.5	1	2	5	10	5 min.	50	Environmental research Drinking water check	
		Ammonium-Nitrogen	0.2	0.5	1	2	5	10				
60006	-Ni	Nickel	0.5	1	2	5	10	2 min.	50	Waste water check Process management		
60045	-NO <sub>2</sub> (C)	Nitrite (High range)	16	33	66	160	330	≥660	5 min.	50	Waste water management Process management Educational material	
		Nitrite-Nitrogen (High range)	5	10	20	50	100	≥200				
63000	-NO <sub>2</sub>	Nitrite	0.02	0.05	0.1	0.2	0.5	1	2 min.	50	Environmental research Fish farm management	
		Nitrite-Nitrogen	0.005	0.01	0.02	0.05	0.1	0.2				0.5
60046	-NO <sub>3</sub> (C)	Nitrate (High range)	90	225	450	900	2250	4500	5 min.	50	Waste water management Process management Educational material	
		Nitrate-Nitrogen (High range)	20	50	100	200	500	1000				
60007	-NO <sub>3</sub>	Nitrate	1	2	5	10	20	45	3 min.	50	Drinking water check Supply water management	
		Nitrate-Nitrogen	0.2	0.5	1	2	5	10				
64043	-O <sub>3</sub>	Ozone	0.1	0.2	0.5	1	2	5	1 min.	50	Residue check Process management	
60001	-pH	pH	pH 5.0 - 9.5		0.5span	10steps			20 sec.	50	Waste water check River water check	
60031	-TBL	pH(TBL)	pH 1.6 - 3.4		0.2span	10steps			20 sec.	50	Environmental research Waste water check	
60021	-BCG	pH(BCG)	pH 3.6 - 6.2		0.2span	14steps			20 sec.	50	Acid rain research Lake research	
60002	-BTB	pH(BTB)	pH 5.8 - ≥8.0		0.2span	12steps			20 sec.	50	Drinking water check Fish farm management	
60032	-TBH	pH(TBH)	pH 8.2 - 9.6		0.2span	7steps			20 sec.	50	Environmental research Waste water check	
60008	-PNL	Phenol	0	0.2	0.5	1	2	5	10	8 min.	40	Waste water check Process management
		Phosphate (High range)	2	5	10	20	50	100				
60057	-PO <sub>4</sub> (C)	Phosphate-Phosphorus (High range)	0.66	1.65	3.3	6.6	16.5	33	1 min.	40	Process management, Fish farm management	
		Phosphate	0.2	0.5	1	2	5	10				
60012	-PO <sub>4</sub>	Phosphate-Phosphorus	0.066	0.165	0.33	0.66	1.65	3.3	1 min.	40	Environmental research Waste water check	
		Phosphate (Low range)	0.05	0.1	0.2	0.5	1	2				
60041	-PO <sub>4</sub> (D)	Phosphate-Phosphorus (Low range)	0.02	0.05	0.1	0.2	0.5	1	5 min.	40	Environmental research Lake water check	
		Phosphate	0.05	0.1	0.2	0.5	1	2				
60037	-S	Sulfide (Hydrogen sulfide)	0.1	0.2	0.5	1	2	5	15 min.	40	Environmental research Hot spring water check	
60015	-SiO <sub>2</sub>	Silica	5	10	20	50	100	200	6.5 min.	40	Process management	
60023	-SiO <sub>2</sub> (D)	Silica (Low range)	0.5	1	2	5	10	20	6.5 min.	40	Boiler management Process management	
60056	-SO <sub>3</sub> (C)	Sulfite (High range)	50	100	200	500	1000	2000	10 sec.	50	Boiler management Process management	
60024	-TH	Total Hardness	0	10	20	50	100	200	30 sec.	50	Drinking water check Supply water management	
60050	-TN·i	Total Nitrogen (Inorganic)	0	5	10	25	50	100	20 min.	40	Waste water check	
62000	-Zn	Zinc	0	0.2	0.5	1	2	≥5	1 min.	50	Waste water check Process management	

## Reagent for Pretreatment

Order Code No.	Model	Testing Item	Purpose	Quantity
68014	As-RA	Pretreatment for As measurement	Removing of PO <sub>4</sub> <sup>3-</sup>	about 35 times
68003	Cr-RA	Pretreatment for total chromium measurement	Oxidation of Cr <sup>3+</sup> into Cr <sup>6+</sup>	about 100 times
68002	NO <sub>3</sub> -RA	Pretreatment for NO <sub>3</sub> measurement	Removing of NO <sub>2</sub> <sup>-</sup>	50 times

# I What is PACK TEST ?

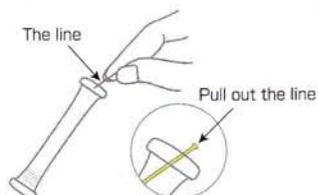


It is the most simplified water quality test. "How to use" is shown in the figure below. By a simplified operation, lower concentrations with one figure than "Ion selective Test Paper" can be detected. (Data within our company) "PACK TEST" has 56 items so that you can choose the suitable ones according to your measuring needs. By the way, our "Web site" is filled with many informations about our products, description of "PACK TEST" etc. which may be useful for you. Please make the most of this information.

Standard model of "PACK TEST" (WAK-)

## How to use

① Remove the line at the top to clear aperture.



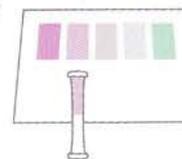
② Press the side of the tube to expel air.



③ Immerse the tube to fill it halfway.



④ Shake the tube lightly a few times. After the reaction time, put the tube on the color chart as shown and compare with the standard colors.



## Main applications

**Process management** Management of raw materials, process, circulating water. Inspection of drinking water

**Waste water management** Check of waste water releases in the environment. Management of waste water treater. Official inspection. Early detection of problem with factory's equipment. Water waste leading/regulation

**Inspection of drinking water** Inspection of water in well, easy water service, reservoir. Control of disinfection for water. Water inspection after a disaster or during outdoor activities. Water inspection in the farms

**Fish firm management** Check of fish pond water, supply water, water in aquarium, water for fish transportation

**Environmental research** Field work. River and lake water investigations. Research on water quality distribution. Search of pollution-origins. Research on "Acid Rain". Environmental research in hard conditions.

**Education** Educational practice on environment. Scientific experiments and studies in schools, high schools and universities.

**Agriculture** Management of rearing solutions in hydroponics. Check of agricultural feed water

**Others** Pre-check of precise analysis, various researches and studies

## About the handling of "PACK TEST"

- Management of raw materials, process, circulating water. Inspection of drinking water
- Check of waste water releases in the environment. Management of waste water treater. Official inspection. Early detection of problem with factory's equipment. Water waste leading/regulation
- Inspection of water in well, easy water service, reservoir. Control of disinfection for water. Water inspection after a disaster or during outdoor activities. Water inspection in the farms
- Check of fish pond water, supply water, water in aquarium, water for fish transportation



37-11, DEN-ENCHOFU 5 CHOME, OHTA-KU,  
TOKYO 145-0071 JAPAN FAX:+81-3-3721-0666  
<http://kyoritsu-lab.co.jp/eng/> E-mail:eng@kyoritsu-lab.co.jp



E-Mail: [hyhxz@hotmail.com](mailto:hyhxz@hotmail.com)  
Fax : 0755-2672 9332