

New Ion Selective Electrodes and Solution Kits

Select from a wide range of Ion Selective Electrodes (ISE) to suit a wide variety of applications. Each electrode has a typical response time of 20 to 30 seconds, but will vary with solution concentration. Gas sensing electrodes also include replacement membranes. Three electrode types are offered: Membrane/Solid State, Gas Sensing, and Glass Bulb.

All electrodes presented are either single or double junction electrodes. Single junction electrodes are ideal for clean water applications. Use double junction electrodes for testing dirty water and solutions with heavy metals or organics. All electrodes are refillable and include 15 ml of electrolyte, filling pipette and instructions. Solid state electrodes also include polishing strips. Electrodes shipping weight: 0.45 kg (0.5 lb).

Select both the electrode and solution kit to complete your measurement system. Solution kits contain the solutions and accessories needed for calibration, sample preparation and measurement of ion concentration and activity. All solutions are supplied with MSDS (Material Safety Data Sheet) and have a value of 1000 ppm. Make serial dilutions for lower values using the labware kit WD35613.60.

Solution kits include replacement reference electrolyte, ISA (ionic strength adjustor), calibration standard, and filling pipette. Solution kits for solid state electrodes include polishing strips. Solution kits for gas sensing electrodes include replacement membranes.

Shpg wt .9 kg (1 lb).

Select from 21 different electrodes including those for Calcium, Lead, Potassium and Nitrate!!

WD35812.18
Fluoride electrode

APPLICATIONS

Greenhouses
Water Quality
Laboratory Research
Water Treatment

SPECIAL FEATURES

Epoxy body for durability and resistance
Three electrode types - Membrane/Solid State,
Gas Sensing, and Glass Bulb
Refillable electrodes
Work with pH/ORP meters with 0.1 mV resolution



PH400 Ion Selective Electrode Ordering Information

Applications	Electrode Range/Type	Electrode Cat No.	Solution Kit	Replacement Calibration Std	Replacement ISA
Ammonia (NH₃) High purity power station water, fish tanks, sea water, waste water, plating baths, air/stack gases, and biological samples.	17,000 to 0.01 ppm Gas Sensing Single Junction	WD35802.00	WD35802.50	WD35803.01	WD35803.50
Ammonium (NH₄⁺) Boiler feed water, natural water and fertilizers. User must supply cal standard.	18,000 to 0.01 ppm Polymer Membrane Double Junction	WD35812.02	WD35802.53	--	WD35803.53
Bromide (Br⁻) Water, wine, soil, plant tissue, blood electrolytes and clinical analysis	79,000 to 0.4 ppm Solid State Double Junction	WD35812.04	WD35802.55	WD35803.03	WD35803.51
Cadmium (Cd⁺²) Plating Baths, User must supply calibration standard.	11,200 to 0.01 ppm Solid State Double Junction	WD35812.06	WD35802.57	-	WD35803.51
Calcium (Ca⁺²) Water softeners, boiler feed water, drinking/mineral water, blood, clinical analysis, food	40,000 to 4.4 ppm Polymer membrane Double Junction	WD35812.08	WD35802.59	WD35803.03	WD35803.52

PH400 ISE Electrodes (cont'd)

Applications	Electrode Range/Type	Electrode Cat No.	Solution Kit	Replacement Calibration Std	Replacement ISA
Carbon Dioxide/Carbonate Soft drinks/carbonated beverages, wine, beer, fermentation processes, bacteria cultures	440 to 4.4 ppm Gas sensing Single Junction	WD35802.10	WD35802.60	WD35803.07	WD35803.55
Chloride (Cl⁻) River/tap water, plant tissue, soils, boiler feed water, blood electrolytes, clinical analysis, sweat, urine, cement, plating baths, food samples	35,000 to 1.8 ppm Solid State Double Junction	WD35812.12	WD35802.63	WD35803.09	WD35803.51
Copper (Cu⁺²) Plating baths and water.	6350 to 0.00064 ppm Solid State Double Junction	WD35812.14	WD35802.65	WD35803.11	WD35803.51
Cyanide (CN⁻) Plating baths, waste water and plant tissue. User must supply calibration standard.	260 to 0.13 ppm Solid State Double Junction	WD35812.16	--	--	WD35803.50
Fluoride (F⁻) Drinking/natural water, wastewater, air/stack gas, acids, sea water minerals, soils, food, biological fluids, toothpaste, coal, soft drinks, bone	saturated to 0.02 ppm Solid State Double Junction	WD35812.18	WD35802.69	WD35803.13	WD35803.58
Fluoroborate (BF₄⁻) Plating baths (boron analysis)	10,800 to 0.1 ppm Polymer Membrane Double Junction	WD35812.20	WD35802.71	WD35803.15	WD35803.60
Iodide (I⁻) Milk, feeds, plants and pharmaceuticals	127,000 to 0.006 ppm Solid State Double Junction	WD35812.22	WD35802.73	WD35803.17	WD35803.51
Lead (Pb⁺²) Plating baths and organic compounds	20,700 to 0.2 ppm Solid State Double Junction	WD35812.24	WD35802.75	WD35803.20	WD35803.56
Nitrate (NO₃⁻) Surface/drinking water, sewage effluent, soil extracts, fertilizers, plant tissue, meat, potatoes, spinach, beets, baby food	62,000 to 0.5 ppm Polymer Membrane Double Junction	WD35812.30	WD35802.79	WD35803.24	WD35803.60
Nitrogen Oxide (NOx) Air and stack gases	220 to 0.2 ppm Gas sensing Single Junction	WD35802.32	WD35802.82	WD35803.26	WD35803.57
Perchlorate (ClO₄⁻) Explosives and solid propellants	98,000 to 0.7 ppm Polymer Membrane Double Junction	WD35812.34	WD35802.85	WD35803.28	WD35803.60
Potassium (K⁺) Wastewater, river/tap water, blood, clinical analysis, saliva, serum, fertilizers, soils, wines	39,000 to 0.04 ppm Polymer Membrane Double Junction	WD35812.38	WD35802.89	WD35803.30	WD35803.53
Silver/Sulfide (Ag⁺/S⁻²) Sewage effluent, soils, sediments, plating baths, photographic fixing solutions. Supply sulfide soln.	107,900 to 0.01 ppm Solid State Double Junction	WD35812.40	WD35802.91	WD35803.32	WD35803.51
Sodium (Na⁺) Steam condensates in power plants, blood, clinical analysis, serum, wine, glass, seawater, swimming pools, fish farms and aquariums	23,000 to 0.2 ppm Glass Bulb Double Junction	WD35812.42	WD35802.93	WD35803.34	WD35803.54
Surfactant (X⁺, X⁻) Detergents, dishwashing liquids, cleaning supplies, food products. For titration only.	12,000 to 1.0 ppm Polymer Membrane Double Junction	WD35812.44	WD35802.95	WD35803.35	WD35803.59
Water Hardness (Ca⁺² Mg⁺²) Water softeners, boiler feed water, clinical analysis, drinking/mineral water, blood, food.	40,000 to 0.4 ppm Polymer Membrane Double Junction	WD35812.48	WD35802.99	WD35803.05	WD35803.52

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