



Testing Reagents



Hach is the world's leading supplier of water testing equipment that provides accurate, efficient and easy to carry out water analysis. A wide selection of measuring equipment is available for field and laboratory use that can test various parameters, all of which need specific reagents. The commonly used ones are detailed below, though others for more specialised parameters are available on request.

PHYSIOCHEMICAL TESTS

| Parameter | Reagents | Range | Tests/Packet |
|----------------------------------|---|--|--------------|
| Alkalinity | Alkalinity Reagent Set for Digital Titrator | 10 - 4,000 mg/L CaCO ₃ | Pk/100 |
| | Alkalinity (Total) TNTplus Vial Test, 25 vials | 25 - 400 mg/L CaCO ₃ | |
| | Alkalinity Test Kit | 0 - 400 mg/L CaCO ₃ | |
| Aluminium | AluVer 3 Aluminum Reagent Powder Pillows | 0.008 - 0.800 mg/L Al | |
| | Aluminum Reagent Set, Aluminon | 0.008 - 0.800 mg/L Al | |
| | Aluminum Reagent Set, ECR method | 0.002 - 0.220 mg/L, Al | |
| Ammonia/ Ammonium | Nessler Reagent Solution, 500mL, 1000mL | 0.02 - 2.50 mg/L NH ₃ -N | |
| | Ammonium Ionic Strength Adjustor (ISA) Powder | 0.01 - 10 mg/L NH ₃ -N | |
| | Ammonia TNTplus Vial Test, ULR, 25 vials | 0.15 - 2.00 mg/L NH ₃ -N | |
| | Ammonia Salicylate Reagent Powder Pillows | 0.01 - 0.50 mg/L NH ₃ -N | |
| Barium | Bariver3, Barium Reagent Powder Pillows | 2 - 100 mg/L Ba | |
| Boron | Borover 3, Boron Reagent Powder Pillows | 0.2 - 14.0 mg/L B | |
| | Boron Standard Solution, 1000 mg/L as B (NIST), 100mL | | |
| Calcium Hardness | Hardness (Calcium) Reagent Set, LR & HR for Digital Titrator or Buret | 10 - 160 mg/L; 100 - 4,000 mg/L; 0 - 5,000 mg/L CaCO ₃ | |
| Chlorine (Free/Total) | Chlorine (Free and Total) Reagent Set, DPD, Powder Pillows | 0.02 - 2.00 mg/L Cl ₂ | Pk/1000 |
| | Free Chloride DPD Reagent Powder Pillows | 0.1 - 10.0 mg/L Cl ₂ 0.05 - 4.00 mg/L Cl ₂ | |
| Chloride | Chloride Reagent Set, Silver Nitrate Digital Titrator, Full Range | 10 - 100mg/L; 100-10,000mg/Cl | Pk/100 |
| | Chlorine Reagent Set, Mercuric Nitrate Digital Titrator | 10 - 160mg/L; 100-8,000mg/L Cl | |
| Copper | CuVer® 1 Copper Reagent Powder Pillows | Up to 5.00 mg/L Cu | |
| Fluoride | Fluoride Ionic Strength Adjustor (ISA) Powder Pillows | 0.01 mg/L to saturated | Pk/250 |
| | SPADNS 2 (Arsenic-free) Fluoride Reagent Solution, 1,000mL | 0.02 - 2.00 mg/L F- | |
| Iron | FerroVer Iron Reagent Powder Pillows | 0.02-3.00mg/L Fe | Pk/100 |

| Parameter | Reagents | Range | Tests/Packet |
|----------------------------------|---|--|--------------|
| Manganese | Manganese Reagent Set, LR, PAN | 0.006 - 0.700 mg/L Mn | Pk/100 |
| | Manganese Reagent Set, HR, Periodate Oxidation | 0.1-20.0 mg/L Mn | |
| Magnesium | Hardness Reagent Set, Calmagite Colorimetric | 0.05 - 4.00 mg/L CaCO ₃ | |
| Nitrate | NitriVer® 3 Nitrite Reagent Powder Pillows | 0.1 to 10.0 or 0.3 to 30.0 mg/L as nitrate-N | |
| Nitrite | NitriVer® 2 Nitrite Reagent Powder Pillows | 2 - 250 mg/L NO ₂ | |
| Phosphorus/ Phosphate | PhosVer® 3 Phosphate Reagent Powder Pillows | 0.02 - 2.50 mg/L PO ₄ | |
| Potassium | Potassium Reagent Set | 0.1 - 7.0 mg/L K | |
| Silica | Silica Reagent Set, High Range | 1 - 100 mg/L SiO ₂ | |
| Sodium | Sodium/Potassium Ionic Strength Adjustor (ISA) Powder Pillows | 10 - 2,000 µg/L Na+ | |
| Sulphates | SulfaVer® 4 Sulfate Reagent Powder Pillows | 2 to 70 mg/L SO ₄ | |
| Total Hardness | Hardness (Total) Reagent Set, LR,HR for Digital Titrator | 10-160 mg/L; 100-4,000 mg/L CaCO ₃ | |
| | Hardness Reagent Set, Calmagite Colorimetric | 0.05 - 4.00 mg/L as CaCO ₃ | |
| Zinc | ZincoVer® 5 Zinc Reagent Powder Pillows | 0.01 to 3.00 mg/L Zn | |

BACTERIOLOGICAL TESTS

| Parameter | Reagents | Tests/Packet |
|---------------------------------------|--|--------------|
| Total Coliforms and E.Coli | Prepared agar plates m-ColiBlue24 - Ready-to-use media and give simultaneous results for total coliforms and E. coli | Pk/15 |
| Enterococci | m-EI prepared agar plates - Detection by the membrane filtration method (MF) | |
| Total Bacteria | Total Bacteria Media Set | Pk/25 |
| Pseudomonas Aeruginosa | Pseudomonas Broth, Plastic Ampules | Pk/50 |
| Iron-related Bacteria | BART test, iron-related bacteria | Pk/9 |

WASTE WATER TESTS

| Parameter | Reagents | Range | Tests/Packet |
|-----------------------|---|---------------------------------|----------------|
| BOD | Nitrification Inhibitor for BOD, Formula 2533, TCMP | Nitrification Inhibitor | 2500 |
| COD | COD Digestion Vials, High Range | 20 - 1500 mg/L CO | Pk/150 |
| Total Nitrogen | Nitrogen, total, TNT | 0.5 - 25 mg/L N | 25 to 50 tests |
| Total Organic | TOC TNTplus Vial Test | 0.06 - 3.5 mg/L PO ₄ | 25 tests |

HEAVY METALS

| Parameter | Reagents | Range | Tests/Packet |
|-----------------|---------------------------------|------------------|--------------|
| Arsenic | Arsenic Low Range, LR Test Kit | 0 - 500 ppb As | Pk/100 |
| | Arsenic High Range, HR Test Kit | 0 - 4000 ppb As | |
| Chromium | Chromium Total Reagent Set | 0.10 - 0.700mg/L | |

STANDARD SOLUTIONS

| Parameter | Reagents | Range |
|--|--|---|
| PH | Buffer | pH 4.01, pH 7.00, pH10.00 |
| Conductivity (EC) Standards | Conductivity Standard Solution | 1,412 µS/cm ±10% at 25°C, 745.5 mg/L ±10%, 0.01M KCl |
| | Singlet Single-use Conductivity Standard Solution | 1,413 µS/cm, KCl |
| | Conductivity Standard Solution | 18,000 µS/cm, NaCl |
| | Sodium Chloride Standard Solution | 491 mg/L NaCl (1,000 µS/cm) |
| Total Dissolved Solids (TDS) Standard | Natural Water Standard Solution | 3000ppm TDS |
| Other Standards | Chemical reagent standards, Spectrophotometer standards, Turbidity meter standards, Hqd meter standards. | |