



a xylem brand

## YSI 9300 and 9500 Test Methods

The YSI 9300 and 9500 test procedures are based on established methods of analysis or use unique chemical methods. These laboratory techniques are adapted, while retaining the essential features of the method so as to provide simplified test procedures.

The following table indicates the status of the analytical method on which various 9300/9500 methods are based, and references the standard methods or laboratory procedures which utilize these analytical methods.

TEST	ANALYTICAL METHOD	METHOD REF
Alkalinity M (Alkaphot M)	Buffer/Indicator	A 7
Alkalinity P (Alkaphot P)	Buffer/Indicator	A 7
Aluminium	Eriochrome Cyanine R	B 1, 3, 9
Ammonia	Indophenol	B 1, 4, 9, 11
Bromine	DPD	B 4, 9
Boron	Azomethine	B 6
Calcium Hardness (Calcicol)	Buffer/Indicator	A 7
Chloride (Chloridol)	Silver Nitrate	B 8
Chlorine (DPD)	DPD	B 1, 2, 4, 9, 11, 13, 15
Chlorine HR	Potassium Iodide	B 4
Chromium Cr <sup>iii</sup> (Chromicol)	Manganese Dioxide Oxidation Diphenylcarbazide Indicator	B 1, 3
Chromium Cr <sup>vi</sup> (Chromicol)	Diphenylcarbazide Indicator	B 1, 3
Copper (Coppercol)	Biquinoline	B 5, 9
Cyanuric Acid	Melamine	B 14
Fluoride	Zirconyl Chloride/Eriochrome Cyanine	B 4
Hardness (Hardicol)	Buffer/Indicator	A 7
Hydrogen Peroxide LR	Catalysed DPD	B 4
Hydrogen Peroxide HR	Catalysed Potassium Iodide	B 14
Hydrazine	P-Dimethylaminobenzaldehyde	B 4, 9, 10
Iron LR	PPST	B 14
Iron MR	1,10-Phenanthroline	B 1, 9, 11
Iron HR	Thioglycollate	B 2, 3
Manganese	Leucomalachite Green	B 3
Magnesium (Magnecol)	Colour Complex	A 7
Molybdate LR	Dihydroxibenzene Disulphonic Acid Complex	B 14
Molybdate HR	Thioglycollate	B 9
Nickel (Nickeltest)	Nioxime Indicator	B 14
Nitrate (Nitratetest)	Reduction/Dizotization	B 1, 4
Nitrite (Nitricol)	Diazotization	B 1, 3, 4
Nitrite (Nitriphot)	Catalysed Oxidation of Iodide	A 7
Organophosphonate	Catalysed Oxidation/Molybdenum Blue	B 4
Ozone	DPD	B 4
pH (Phenol Red)	Phenol Red	B 9
Phenols (Phenoltest)	4-Aminoantipyrine	B 1, 4
Phosphate LR	Molybdenum Blue	B 1, 2, 3, 4, 9, 11
Phosphate HR	Vandomolybdate	B 1, 3, 9
Potassium	Sodium Tetraphenylboron	B 8
Silica	Molybdenum Blue	B 1, 2, 3, 4, 9, 10
Sulphate	Barium Chloride	B 2, 4
Sulphite (Sulphitest)	Bleaching of specific Indicator	A 7
Total Alkalinity (Alkaphot)	Buffer/Indicator	A 7
Zinc	Zincon	B 1, 2

## REFERENCES

- A) Novel Palintest Method. Novel analytical method developed by Palintest Ltd.
  - B) Standard Palintest Method. Method developed by Palintest from standard method, published text book procedure.
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- 1) Standard Methods for the Examination of Water and Waste Water, published by American Public Health Association, American Water Works Association, Water Pollution Control Federation.
  - 2) Analysis of Raw, Potable and Waste Waters, 1972, published by HMSO.
  - 3) Vogel's Textbook of Quantitative Inorganic Analysis.
  - 4) Methods for the Examination of Waters and Associated materials. Standing Committee of Analysis, published by HMSO.
  - 5) Methods of Soil Analysis, Chemical and Microbiological Properties, published by American Society of Agronomy.
  - 6) The Analysis of Agricultural Materials, Ministry of Agriculture, Fisheries and Food, Reference Book 427, published by HMSO.
  - 7) Unpublished Method, Palintest Ltd, R & D Department.
  - 8) Quantitative Inorganic Analysis, R Belcher and A J Nutten.
  - 9) Standard Field Method BS 1427, British Standards Institution.
  - 10) Standard Method BS 2690, British Standards Institution.
  - 11) Standard Method BS 6068, British Standards Institution.
  - 12) ISO Standard Method, International Organisation for Standardisation.
  - 13) DIN Standard 38.408, Deutsche Einheitsverfahren zur Wasser-, Abwasser- und Schlammuntersuchung.
  - 14) Published Method not specifically referenced.
  - 15) Approved by the USEPA as accepted versions of Standard Method 4500-CL-G.
  - 16) EPA Method. Method approved by EPA or accepted as an approved variant of EPA Method.