

TNTplus[®] Vial Chemistries

Applications

- Wastewater
- Industrial Water
- Drinking Water



Expert water analysis made simple.

Reduce errors

A unique barcode label on each Hach[®] TNTplus Vial Chemistry is automatically read by the spectrophotometer when used with Hach's DR6000[™] UV-VIS Spectrophotometer or DR3900[™] Benchtop Spectrophotometer to identify the appropriate method and take the measurement. This significantly reduces errors as well as scratched, flawed or dirty glassware becomes non-issue as the instrument averages 10 readings and rejects outliers.

Lot after Lot - Be Right

Truecal[™] with each vial includes the calibration data for each individual lot, reducing variation in results. This allows you to meet reporting standards and to perform proficiency testing with higher confidence.

Documented shelf life and COA

The barcode details batch number and expiry date of reagents, which are documented along with the measurement result. An automatic warning is issued if expiry date has passed. Certificate of Analysis (COA) is available on RFID* tag on the box, which can be read out with the DR6000 or DR3900 spectrophotometer.

No reagent blank necessary

The high quality of TNTplus vials, tight reagent production controls, instrument calibration verification, and high instrument stability all combine to eliminate the need to run reagent blanks — saving you time and money!

Safe and easy handling

TNTplus vials use innovative Dosicaps that are easier to use than powder pillows or liquid reagents. There's no risk of spillage, no safety risk, or risk of contamination with Dosicaps because the reagents are completely contained within the vial cap. The glassware used assures the best precision and the vials have a flat bottom so they can stand on their own.

Packages of TNTplus vials are color-coded for fast and easy parameter and range recognition for the exact test you need. Step-by-step illustrated test methods are printed on the box for quick reference.

TNTplus Vial Tests*

| Prod. No. | Parameter | Range | Method Name | Method | Truecal | EPA |
|-----------|---|--|----------------------------|---------------------------|---------|-----|
| TNT870 | Alkalinity, Total | 25 - 400 mg/L CaCO ₃ | Colorimetric | 10239 | | |
| TNT848 | Aluminium | 0.02 - 0.50 mg/L Al | Chromazurol S | 10215 | | |
| TNT830 | Ammonia, Nitrogen | 0.015 - 2.00 mg/L NH ₃ -N | Salicylate | 10205 | Yes | Yes |
| TNT831 | | 1 - 12 mg/L NH ₃ -N | Salicylate | 10205 | | Yes |
| TNT832 | | 2 - 47 mg/L NH ₃ -N | Salicylate | 10205 | Yes | Yes |
| TNT833 | | 47 - 130 mg/L NH ₃ -N | Salicylate | 10205 | | Yes |
| TNT834 | | 100 - 1800 mg/L NH ₃ -N | Salicylate | 10301 | | |
| TNT882KTO | Anammox activity | 0 - 1000 mAbs | Heme | 10304 | | |
| TNT817 | International Bitter Units | ≥2 International Bitter Units | Analogous MEBAK and ASBC | 10288 | | |
| TNT877 | Boron | 0.05 - 2.50 mg/L B | Azomethine-H | 10274 | | |
| TNT852 | Cadmium | 0.02 - 0.30 mg/L Cd | Cadion | 10217 | | |
| TNT879 | Chloride | 1 - 70 mg/L Cl 70 - 1000 mg/L Cl | Iron(III)-thiocyanate | 10291 | | |
| TNT866 | Chlorine, Free | 0.05 - 2.00 mg/L Cl ₂ | DPD | 10231 | | Yes |
| TNT867 | Chlorine, Total | 0.05 - 2.00 mg/L Cl ₂ | DPD | 10231, 10232 | | Yes |
| TNT854 | Chromium, Hexavalent Chromium, Total | 0.03 - 1.00 mg/L Cr | 1,5-Diphenylcarbohydrazide | 10218 (Cr ⁶⁺) | | Yes |
| TNT820 | COD (Chemical Oxygen Demand) | 1 - 60 mg/L COD | Reactor Digestion | 10211 | Yes | |
| TNT821 | | 3 - 150 mg/L COD | Reactor Digestion | 8000 | | Yes |
| TNT822 | | 20 - 1500 mg/L COD | Reactor Digestion | 8000 | Yes | Yes |
| TNT823 | | 250 - 15000 mg/L COD | Reactor Digestion | 10212 | | |
| TNT824 | | 5,000 - 60,000 mg/L | Reactor Digestion | 10212 | | |
| TNT815 | COD (for samples up to 20000 mg/L Chloride) | 7 - 70 mg/L COD | Reactor Digestion | 10299 | | |
| TNT816 | | 70 - 700 mg/L COD | Reactor Digestion | 10299 | | |
| TNT825 | Chemical Oxygen Demand (COD), Mercury-Free | 25 - 1000 mg/L COD | Reactor Digestion | 8000 | | |
| TNT860 | Copper | 0.1 - 8.0 mg/L Cu | Bathocuproin | 10238 | | |
| TNT862 | Cyanide | 0.01 - 0.6 mg/L CN | Pyridine barbituric acid | 10265 | | Yes |
| TNT878 | Fluoride | 0.1 - 2.5 mg/L F | SPADNS 2 | 10225 | | Yes |
| TNT871 | Formaldehyde | 0.5 - 10 mg/L H ₂ CO | Acetylacetone | 10295 | | |
| TNT858 | Iron, Ferrous Iron, Total | 0.2 - 6.0 mg/L Fe | 1, 10 Phenanthroline | 10229 | | Yes |
| TNT850 | Lead | 0.1 - 2.0 mg/L Pb | PAR | 10216 | | |
| TNT849 | Magnesium | 0.5 - 50 mg/L Mg | Metalphthalein | 10292 | | |
| TNT856 | Nickel | 0.1 - 6.0 mg/L Ni | Dimethylglyoxime | 10220 | | |
| TNT835 | Nitrate, Nitrogen | 0.23 - 13.50 mg/L NO ₃ -N | Dimethylphenol | 10206 | Yes | Yes |
| TNT836 | | 5 - 35 mg/L NO ₃ -N | Dimethylphenol | 10206 | Yes | Yes |
| TNT839 | Nitrite, Nitrogen | 0.015 - 0.600 mg/L NO ₂ -N | Diazotization | 10207 | Yes | Yes |
| TNT840 | | 0.6 - 6.0 mg/L NO ₂ -N | Diazotization | 10237 | Yes | Yes |
| TNT841 | | 2 - 90 mg/L NO ₂ -N | Diazotization | 10296 | | |
| TNT880 | Nitrogen, Simplified Total Kjeldahl | 0 - 16 mg/L N | Simplified TKN (s-TKN™) | 10242 | | Yes |
| TNT826 | Nitrogen, Total Inorganic | 1 - 16 mg/L N | Persulfate Digestion | 10208 | Yes | |
| TNT827 | | 5 - 40 mg/L N | Persulfate Digestion | 10208 | | |
| TNT828 | | 20 - 100 mg/L N | Persulfate Digestion | 10208 | | |
| TNT868 | Phenols | 5 - 150 mg/L | 4-Aminoantipyrine | 10266 | | Yes |
| TNT846 | Phosphorus, Reactive (Ortho) | 1.6 - 30 mg/L PO ₄ -P (5 - 90 mg/L PO ₄) | Molybdovanadate | 10214 | | |

TNTplus Vial Tests*

| Prod. No. | Parameter | Range | Method Name | Method | Truecal | EPA |
|-----------|-------------------------------|--|-----------------------------|--------|---------|-----|
| TNT843 | Phosphorus, Acid Hydrolyzable | 0.05 - 1.5 mg/L PO ₄ -P (0.15 - 4.5 mg/L PO ₄) | Ascorbic Acid | 10209 | Yes | Yes |
| TNT844 | Phosphorus, Reactive (Ortho) | 0.5 - 5.0 mg/L PO ₄ -P (1.5 - 15.0 mg/L PO ₄) | Ascorbic Acid | 10209 | | Yes |
| TNT845 | Phosphorus, Total | 2 - 20 mg/L PO ₄ -P (6 - 60 mg/L PO ₄) | Ascorbic Acid | 10209 | Yes | Yes |
| TNT864 | Sulfate | 40 - 150 mg/L SO ₄ | Turbidimetric | 10227 | | |
| TNT865 | Sulfate | 150 - 900 mg/L SO ₄ | Turbidimetric | 10227 | | |
| TNT861 | Sulfide | 0.1 - 2.0 mg/L S ²⁻ | Dimethyl-p-phenylenediamine | 10294 | | Yes |
| TNT874 | Surfactants, Anionic | 0.1 - 4.0 mg/L | Methylene Blue (MBA) | 10278 | | |
| TNT885 | Surfactants, Cationic | 0.2 - 2 mg/L as CTAB | Bromophenol Blue | 10305 | | |
| TNT875 | Surfactants, Nonionic | 0.2 - 6.0 mg/L as Triton x 100 | TBPE | 10275 | | |
| TNT876 | Surfactants, Nonionic | 6 - 200 mg/L as Triton X-100 | TBPE | 10275 | | |
| TNT810 | TOC (Total Organic Carbon) | 1.5 - 30.0 mg/L C | Direct Method | 10267 | | Yes |
| TNT811 | | 30 - 300 mg/L C | Direct Method | 10267 | | Yes |
| TNT819 | Vicinal diketones (VDK) | 0.015 - 0.5 mg/kg Diacetyl | Analogous MEBAK and ASBC | 10276 | | |
| TNT872 | Volatile Acids | 50 - 2,500 mg/L Acetic Acid | Esterification | 10240 | | Yes |
| TNT869 | Water Hardness | 20 - 350 mg/L as CaCO ₃ 5 - 100 mg/L Ca 3 - 50 mg/L Mg | Metalphthalein | 10293 | | |

*Subject to change without notice.
Part numbers may vary by country.

Order Information

Accessories

- TNT890** Metals Prep Set (used for Cu, Fe, Pb, Cd, & Ni digestion), 50 digestions
- TNT892** Calcium Separation Set (for Cadmium TNTplus Test TNT852), 24 separations
- TNT919** Sample Blank Vials for TNTplus, 5/pk
- BBP078** Pipet, Variable Volume, 0.2-1.0 mL
- BBP065** Pipet, Variable Volume, 1.0-5.0 mL
- BBP079** Pipet Tips for 0.2-1.0 mL Pipet (BBP078), 100/pk
- BBP068** Pipet Tips for 1.0-5.0 mL Pipet (BBP065), 75/pk
- LZP320** Pipet Set BBP065 & BBP078, with tips

DRB200 Reactors

- DRB200-01** 9 vials x 13 mm + 2 vials x 20 mm (single block), 115 VAC
- DRB200-02** 21 vials x 13 mm + 4 vials x 20 mm (dual block), 115 VAC
- DRB200-03** 15 vials x 13 mm + 4 vials x 13 mm (dual block), 115 VAC
- DRB200-04** 12 vials x 13 mm + 8 vials x 20 mm (dual block), 115 VAC
- DRB200-05** 9 vials x 13 mm + 2 vials x 20 mm (single block), 230 VAC
- DRB200-06** 21 vials x 13 mm + 4 vials x 20 mm (dual block), 230 VAC
- DRB200-07** 15 vials x 13 mm + 15 vials x 13 mm (dual block), 230 VAC
- DRB200-08** 12 vials x 13 mm + 8 vials x 20 mm (dual block), 230 VAC

DRB200 Reactor Adapters

- 2895805** Reactor Adapter, 16 mm to 13 mm, for TNTplus vials, 5/pk
- HHA155** Reducing Adapter for DRB200, 20 mm to 16 mm (for 20 mm vial wells of existing reactors to adapt to 16 mm vials)

To complete your chemical analysis, choose from the following Spectrophotometers...*

DR6000 UV-VIS Benchtop Spectrophotometer

With high speed wavelength scanning across the UV and Visible Spectrum, and over 250 pre-programmed testing methods, the DR6000™ is the industry's most advanced lab spectrophotometer. Add in guided step-by-step procedures and integrated quality assurance software, and it makes sure you are ready to handle your comprehensive water testing needs. Available RFID* technology to read out certificates of analysis (COA) of each TNTplus method. Sample bottles with smart tags can be tracked easily with the optional Hach RFID sample-ID system.

DR3900 Benchtop Spectrophotometer

Built with the future of water analysis in mind, the DR3900 Spectrophotometer gives consistently accurate results in a simpler testing format. Using the latest technology, the instrument requires less training and increases confidence in your test results. With 1 Ethernet and 3 USB ports, the DR3900 easily connects to a computer and is programmed to interface with any LIMS system. Available RFID* technology to read out certificates of analysis (COA) of each TNTplus method. Sample bottles with smart tags can be tracked easily with the optional Hach RFID sample-ID system.

DR1900 Portable Spectrophotometer

The DR1900 excels in the field because it is the lightest and most compact portable spectrophotometer. It is built for rugged conditions, and it's flexible, accepting the widest range of vial sizes. Built with field use in mind, the DR1900 has a large, clear screen and a simple user interface that makes testing easier than ever in even the most demanding conditions. Underneath the rugged exterior, the DR1900 has the largest number, - over 220- of the most commonly tested preprogrammed methods already built in. You can also use the easy-to-use interface to create your own methods. Tests are performed with a wavelength range of 340 to 800 nm which make this a field instrument you can use to find results typically only seen in laboratory instruments.

TNTplus vial test evaluation possible, but without barcode identification.

**RFID technology currently available in US, Canada, Puerto Rico, Australia, New Zealand, and Colombia only.*



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