TNTplus®
Vial Chemistries

Hach TNTplus Vial Chemistries offer quality you expect from Hach that's even easier to use and more accurate than ever. For a complete list of available parameters and USEPA acceptance status, please see page 2.

DW
WW
IW

Features and Benefits

Reduce Errors with Bar-coded Vials

A unique barcode label on each Hach TNTplus Vial Chemistry is automatically read by the spectrophotometer when used with Hach's DR spectrophotometers to identify the appropriate method and take the measurement. While increasing ease-of-use and speed of analysis, potential errors are significantly reduced.

No Reagent Blank Necessary

The high quality of TNTplus vials, tight reagent production controls, 10-fold absorbance readings averaged for results determination, instrument calibration verification, and high instrument stability all combine to eliminate the need to run reagent blanks—saving you time and money!

New features have been added to the vial barcode, allowing the spectrophotometer to detect the reagent lot number and expiration date—notifying the user if reagents are expired. Using a DR3900 or DR6000 equipped with the RFID feature, an RFID* tag on the package triggers any required method calibration updates simply by placing the box adjacent to the instrument.

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

Innovative Vial and Reagent Delivery

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.

Even the Package is Useful

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. Simple instructions in multiple languages are included in each carton, facilitating use by a diverse labor force.

Methods for EPA Compliance Monitoring

Hach TNTplus Vial Chemistries for COD (Hach Method 8000), Free and Total Chlorine (SM 4500-Cl G), Chromium VI (SM 3500-Cr B, D), Iron (Hach Method 8008), Ortho- (EPA 365.1) and Total Phosphate (EPA 365.1, 365.3), Ammonia (EPA 350.1), and Nitrite (EPA 353.2) are equivalent to the respective method referenced in parentheses under 40 CFR 136.6 for compliance monitoring. Nitrate TNT835 and TNT836 are approved for drinking water monitoring under 40 CFR 141. As with any method used for compliance reporting, consult with your local regulatory authority.

Specifications and Ordering Information*

Product Number	Parameter	Range (mg/L)	# per Package	USEPA Status	Chemical Method	Shelf Life (months)	Storage Temp (°C)
TNT870	**Alkalinity, Total**	25 to 400 as $CaCO_3$	25		Colorimetric	12	15 to 25
TNT848	**Aluminum**	0.02 to 0.50	24		Chromazurol S	18	15 to 25
TNT830	**Ammonia, ULR**	0.015 to 2.00 as NH_3-N	25	Equivalent	Salicylate	18	2 to 8
TNT831	**Ammonia, LR**	1 to 12 as NH_3-N	25	Equivalent	Salicylate	18	2 to 8
TNT832	**Ammonia, HR**	2 to 47 as NH_3-N	25	Equivalent	Salicylate	18	2 to 8
TNT852	**Cadmium‡***	0.02 to 0.30	25		Cadion	12	2 to 8
TNT820	**COD, ULR**	1 to 60	24		Dichromate	12	15 to 25
TNT82006	**COD, ULR**	1 to 60	144		Dichromate	12	15 to 25
TNT821	**COD, LR**	3 to 150	25	Approved	Dichromate	60	15 to 25
TNT82106	**COD, LR**	3 to 150	150	Approved	Dichromate	60	15 to 25
TNT822	**COD, HR**	20 to 1500	25	Approved	Dichromate	60	15 to 25
TNT82206	**COD, HR**	20 to 1500	150	Approved	Dichromate	60	15 to 25
TNT823	**COD, UHR**	250 to 15000	25		Dichromate	30	15 to 25
TNT82306	**COD, UHR**	250 to 15000	150		Dichromate	30	15 to 25
TNT825	**COD, Mercury-Free HR**	25 to 1000	25		Dichromate	30	15 to 25
TNT866	**Chlorine, Free**	0.05 to 2.00	24	Equivalent	DPD	12	2 to 8
TNT867	**Chlorine, Free and Total**	0.05 to 2.00	24	Equivalent	DPD	12	2 to 8
TNT854	**Chromium (VI and Total†)**	0.03 to 1.00	25	Accepted	Diphenylcarbohydrazide	12	2 to 8
TNT860	**Copper‡**	0.1 to 8.0	25		Bathocuproine	24	15 to 25
TNT858	**Iron‡**	0.2 to 6.0	25	Equivalent	Phenanthroline	30	2 to 8
TNT850	**Lead‡**	0.1 to 2.0	25		PAR	12	15 to 25
TNT890	**Metals Prep Set**	for Fe, Pb, Cd, Ni digestion	50		Acid Persulfate Digestion	36	15 to 25
TNT856	**Nickel‡**	0.1 to 6.0	25		Dimethylglyoxime	24	15 to 25
TNT835	**Nitrate, LR**	0.23 to 13.5 as NO_3-N	25	Approved	Dimethylphenol	24	15 to 25
TNT836	**Nitrate, HR**	5 to 35 as NO_3-N	25	Approved	Dimethylphenol	24	15 to 25
TNT839	**Nitrite, LR**	0.015 to 0.600 as NO_2-N	25	Equivalent	Diazotization	24	2 to 8
TNT840	**Nitrite, HR**	0.6 to 6.0 as NO_2-N	25		Diazotization	24	15 to 25
TNT826	**Nitrogen, Total, LR†**	1 to 16	25		Persulfate Digestion	18	15 to 25
TNT827	**Nitrogen, Total, HR†**	5 to 40	25		Persulfate Digestion	18	15 to 25
TNT828	**Nitrogen, Total, UHR†**	20 to 100	25		Persulfate Digestion	18	15 to 25
TNT880	**Nitrogen, Simplified Total Kjeldahl**	0 to 16	25		Simplified TKN	18	15 to 25
TNT843	**Phosphate, Total† and Ortho, LR**	0.05 to 1.5 as PO_4-P	25	Equivalent	Ascorbic Acid	24	15 to 25
TNT844	**Phosphate, Total† and Ortho, LR**	0.5 to 5.0 as PO_4-P	25	Equivalent	Ascorbic Acid	24	15 to 25
TNT845	**Phosphate, Total† and Ortho, LR**	2 to 20 as PO_4-P	25	Equivalent	Ascorbic Acid	24	15 to 25
TNT846	**Phosphate, Ortho only**	1.6 to 30 as PO_4-P	25		Molybdovanadate	36	15 to 25
TNT864	**Sulfate, LR**	40 to 150 as SO_4	25		Turbidimetric	36	15 to 25
TNT865	**Sulfate, HR**	150 to 900 as SO_4	25		Turbidimetric	24	15 to 25
TNT872	**Volatile Acids**	50 to 2500 as CH_3COOH	25		Esterification	12 1	5 to 25

†Requires digestion.

‡As listed, test determines soluble metal. Order Metals Prep Set TNT 890 to determine total metal.

**Add Calcium Separation Set TNT892 when calcium or magnesium concentrations are higher than 50 mg/L*

**Specifications subject to change without notice.*

Ordering Information *continued*

Accessories

TNT890	Metals Prep Set (used for Cu, Fe, Pb, Cd, & Ni digestion), 50 digestions
TNT892	Calcium Separation Set (used for Cadmium test), 24 separations
TNT919	Sample Blank Vials, 5 qty.
BBP078	Single Channel Pipet, 0.2 to 1.0 mL
BBP065	Single Channel Pipet, 1.0 to 5.0 mL
BBP079	Pipet Tips for BBP078, 100/pk
BBP068	Pipet Tips for BBP065, 75/pk
LZP320	One each of BBP078 and BBP065 and one box tips for each

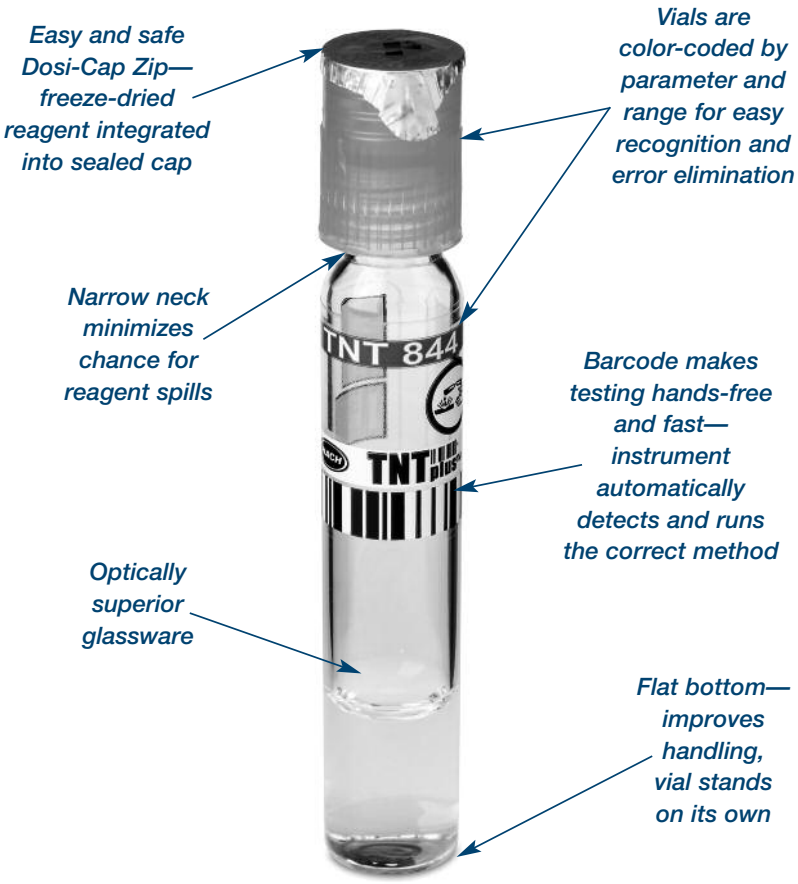
DRB 200 Dry Thermostat Reactor

DRB200-01	9 vials x 13 mm + 2 vials x 20 mm (mono 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 + 15 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 (mono 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

DRB 200 Reactor Adapters

2895805	Reactor Adapter, 16 to 13 mm, 5/pk (for 16 mm vial wells of existing reactors to adapt to 13 mm TNTplus vials)
HHA155	Reducing adapter for DRB 200, 20 to 16 mm (for 20 mm vial wells of existing reactors to adapt to 16mm vials)

Benefits of TNTplus® Vial Chemistries



To complete your chemical analysis, choose from these instruments...

DR 6000™ UV-Vis Laboratory Spectrophotometer

(see Lit. #2797)

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 automatically updates the program calibration factors when you place a TNTplus box near the machine. Sample bottles with smart tags can be tracked easily with the optional Hach RFID sample-ID system.

DR 3900™ Benchtop Spectrophotometer

(see Lit. #2667)

Built with the future of water analysis in mind, the DR 3900 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 DR 3900 easily connects to a computer and is programmed to interface with any LIMS system. Available RFID* technology automatically updates the program calibration factors when you place a TNTplus box near the machine. Sample bottles with smart tags can be tracked easily with the optional Hach RFID sample-ID system.

DR 2800™ Portable Spectrophotometer

(see Lit. #2489)

The Hach DR 2800 Portable Spectrophotometer offers automatic method detection when used with TNTplus reagent vials. It also has an intuitive touch screen user interface and accommodates a wide range of pre-programmed water analysis methods. The small footprint is an advantage whenever you need a reliable portable analytical tool.

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

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At Hach, it's about learning from our customers and providing the right answers. It's more than ensuring the quality of water—it's about ensuring the quality of life. When it comes to the things that touch our lives...

Keep it pure.

Make it simple.

Be right.

For current price information, technical support, and ordering assistance, contact the Hach office or distributor serving your area.

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