

# Hach Spec

**Secondary Standard Sets** 





**Hach SpecCheck Secondary Gel Standards** provide a dependable and ready-to-use solution for verifying the accuracy and consistency of colorimeters and spectrophotometers. By simulating test colors at defined concentrations, Spec soffer an effective instrument quality control check—without the need for reagent preparation or chemical handling.

These computer-formulated, non-hazardous standards have a two-year shelf life from the date of manufacture and require no Safety Data Sheet (SDS), making them both convenient and safe for routine use in the lab and in the field.

### **How They Work:**

Spec Secondary Gel Standards are formulated to produce specific color intensities that simulate known analyte concentrations. Each set includes low, mid, and high values across the calibration range for a specific parameter.

## **Compatibility and Composition:**

Nominal values are established during production by averaging measurements based on lot size. Tolerances are defined using data from ten gels and readings across three instrument platforms, ensuring expected performance from properly functioning instruments.

Upon receipt, measure each Spec s instrument-specific value and record this on the Record of Performance Verification. This will serve as a reference point for tracking future variations. Readings outside the tolerance range may indicate instrument issues—contact technical support if needed. By comparing measured values to expected ones, users can quickly verify instrument accuracy.

# Advantages of Spec✓ Secondary Gel Standards:

- Simplicity: They are easy to use and require no complex preparation procedures.
- **Stability:** Gel standards are more stable than liquid ones, providing a longer shelf life.
- Convenience: No spills from broken vials. Non-hazardous. Ideal for instrument verification in the field or in the lab. Reproducibility. SpecChecks provide a consistent and reproducible signal, ensuring accurate results.

## Uses of Spec√ Secondary Gel Standards:

- Instrument Verification:
  Confirm accurate and consistent readings from colorimeters and spectro-photometers.
- Quality Control: Serve as daily check standards to ensure instruments are operating within acceptable limits, supporting regulatory compliance.
- **Analyst Evaluation:** Compare analyst performance in lab and field settings where preparing standard solutions may not be practical.

**Note:** SpecCheck Standards are secondary standards used only to verify instrument performance. They are not for calibration and do not assess reagent quality or operator technique.

## **SpecCheck Secondary Gel Standards Instrument Compatibility**

SpecCheck	Pocket II PN	DR300 PN	DR900	DR1900	DR3900	DR6000
2635300, DPD Chlorine LR	5870000	LPV445.97.00110	✓	✓	✓	✓
2980500, DPD Chlorine- MR	5870062	LPV445.97.62110	<b>✓</b>	✓	✓	✓
2893300, DPD Chlorine- HR	5870000	LPV445.97.00110 LPV445.97.62110	✓	✓	✓	✓
Chlorine plus pH	5870012	LPV445.97.12110	<b>✓</b>	✓	✓	<b>✓</b>
2507500 Monochloramine/Free Ammonia	5870026	LPV445.97.26110	<b>✓</b>	✓	✓	<b>✓</b>
2708000, Ozone	5956900	LPV445.97.04110	<b>✓</b>	✓	✓	<b>✓</b>
2712500, Fluoride	5953005	X*	✓	✓	✓	<b>✓</b>

<sup>\*</sup>No DR300 is available for Fluoride.

### **Certificate of Analysis**

Product : DPD-Chlorine MR Spec Check Secondary Standards Kit

Product Number: 2980500 Lot Number: A2332 Expiration Date: Dec 2024

Instrument (PRGM)	Blank A2314	STD 1 (mg/L) A2347	STD 2 (mg/L) A2347	STD 3 (mg/L) A2347
DR 6000 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 5000 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 3900 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 3800 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 2800 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 2700 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 1900 (87)	0.00	<u>0.17</u> +/- 0.09	<u>1.60</u> +/- 0.14	<u>2.72</u> +/- 0.30
DR 900 (87)	0.00	<u>0.19</u> +/- 0.09	<u>1.62</u> +/- 0.14	<u>2.64</u> +/- 0.30
DR 800 (114)	0.00	<u>0.19</u> +/- 0.09	<u>1.62</u> +/- 0.14	<u>2.64</u> +/- 0.30
DR 300	0.00	<u>0.17</u> +/- 0.09	<u>1.61</u> +/- 0.14	<u>2.74</u> +/- 0.30
PC II (Channel-MR) (Kit PN 5870062)	0.00	<u>0.18</u> +/- 0.09	<u>1.65</u> +/- 0.14	<u>2.80</u> +/- 0.30

IOTE: Choose the instrument and chlorine program being used. Transfer the control values to the enclosed certificate label and ke he label with your instrument for reference. For example, the test values for using a DR/800 Colorimeter and stored program #114 rould be:

or 1.19, 1.62, and 2.64 mg/L chlorine for Standard 1, Standard 2, and Standard 3 respectively this certificate of Analysis for safe keeping.

Certified by: \_\_\_\_\_\_ for and on the behalf of Hach Company.



Monochloramine/Free Ammonia SpecCheck



Ozone SpecChecks



World Headquarters: Loveland, Colorado USA | hach.com

 United States
 800-227-4224
 fax: 970-669-2932
 email: orders@hach.com

 Outside United States
 970-669-3050
 fax: 970-461-3939
 email: intl@hach.com