



Purified (Reagent) Water Specification Testing Results (Ohio Facility)

For the month of: August 2020

Listed below are the testing results for the purified water used in the manufacture of products at Hardy Diagnostics.

| Test | Testing Frequency | Units | In-House Specification (method detection limit) | Testing Data |
|--|-----------------------|---|---|--|
| Minimum Resistivity* 1,3,4,5 | Continuous Monitoring | Megohm cm | > 16.0 | 18.28 |
| pH** | Daily | N/A | 5.5 – 7.5 | 6.11 |
| Total Organic Carbon 1,3,5 | Monthly | µg/L | < 500 | 290 |
| Heavy Metals (Single) 1,3,4 (Cd, Cr, Cu, Ni, Pb and Zn) | Annually | mg/L | < 0.05 | Cd – ND Cr – ND Cu – ND Pb – ND Ni – ND Zn – ND |
| Heavy Metals (Total) 3,4 | Annually | mg/L | < 0.1 | ND |
| Ammonia/Organic Nitrogen 3 | Monthly | mg/L | < 0.1 | ND |
| Total Chlorine Residual 3,4 | Monthly | mg/L | < 0.1 | ND |
| Maximum Bacterial Content*** 1,3,4,5 | Weekly | colony forming units (CFU) per milliliter | < 10 | <1 |
| Water Quality 3,4 ratio | Annually | ratio | 0.8 – 3.0 | 0.96 |
| Use Test (Student t) 3 | Quarterly | N/A | ≤ 2.78 | 0 |
| Inhibitory Residue 4 | Annually | N/A | < 15% | 10.5% |
| Maximum Silicate, SiO ₂ 3,4 | Annually | mg/L | ≤ 0.05 | ND |

ND = Not Detected at or above the method detection limit.

*Testing data is given as a monthly average at the water source.

**Testing data is given as a monthly average.

***Testing data is given as an average.

References:

1. *Preparation and Testing of Reagent Water in the Clinical Laboratory*, C3-A4. Clinical Laboratory Standards (CLSI), Villanova, PA.
2. *Quality Assurance for Commercially Prepared Microbiological Culture Media*, M22-A3. Clinical Laboratory Standards Institute (CLSI – formerly NCCLS), Villanova, PA.
3. American Public Health Association, *Standard Methods for the Examination of Water and Wastewater*, Washington, D.C.
4. *Manual for the Certification of Laboratories Analyzing Drinking Water*, Criteria and Procedures Quality Assurance, Environmental Protection Agency (EPA).
5. USP. *USP-NF, Water for Pharmaceutical Purposes <1231>*. Rockville, MD: US Pharmacopeial Convention.

Andre Hsiung
Director of Technical Services

Hardy Diagnostics
1430 W. McCoy Lane
Santa Maria, CA 93455
(800) 266-2222
www.hardydiagnostics.com