
ATTI - PERFORMANCE CHECKLIST

AASHTO T 289-22 – Determining pH of Soils for Use in Corrosion Testing

- Sect.* **Sample Size**
- 5.1 1. The amount of soil material required to perform the test is approximately 100 grams of finer than #10,
- 6.1 2. **Initial Preparation of Test Sample:** If the sample is too wet, it may be dried to a moist condition in air or a drying apparatus not exceeding 60°C (140°F).
- 6.1 3. A representative test sample shall then be obtained as per R76.
- 6.2.1 4. **Alternate Method Using #10 Sieve:** The sample shall be separated into two fractions. The fraction retained on the sieve shall be ground with a pulverizing apparatus until the aggregation of soil particles are broken into separate grains.
- 9.1 5. Of the material selected for testing, place a mass of 30.0±0.1 grams into the glass beaker or other suitable container.
- 9.2 6. Add 30.0±0.1 grams of distilled water to the soil sample. Stir to obtain a soil slurry and then cover with a catch glass.
- 9.3 7. The sample must stand for a minimum of 1 hour, stirring every 10 to 15 minutes.
- 9.4 8. Measure the temperature of the sample and adjust the temperature of the controller of the pH meter to that of the sample. On meters with an automatic temperature control, follow the manufactures instructions.
- 9.5 9. Standardize the pH meter by means of the standard solutions.
- 9.6 10. Immediately before immersing the electrode into the sample, stir well with a glass rod. Place the electrode into the soil slurry solution and gently turn the beaker to make good contact between the solution and electrode. **DO NOT** place the electrode into the soil; place into the soil slurry solution.
- 9.7 11. Allow meter to stabilize.
- 9.8 12. Read and record the pH value to the nearest tenth of a whole number.
- 9.9 13. Rinse off the electrode well with distilled water, then dab lightly with tissues to remove any film formed on the electrode.