pH of 1.0% Dispersion
Applicable Product: Noveon® AA-1 Polycarbophil

Scope:
This procedure describes a means of determining the pH of a 1.0% dispersion of Noveon® AA-1 polycarbophil.

Abstract:
A 1.0% dispersion of Noveon® AA-1 polycarbophil is prepared. The pH of the dispersion is determined using a pH meter with a calomel-glass electrode.

Safety Precautions:
1. Wear safety goggles and gloves and follow good laboratory practices.
2. Polymer dust is irritating to the respiratory passages and inhalation should be avoided.
3. See all Material Safety Data Sheets (MSDS) for additional safety and handling information.

Interferences:
The introduction of acidic or basic contaminants will influence the pH measurement.

Apparatus:
1. Laboratory balance capable of ± 0.01 gram accuracy.
2. Flask, 500 ml.
3. Graduated cylinder, 100 ml.
4. Mechanical shaker.
5. Parafilm.
7. Beaker, 300 mL.
8. pH meter equipped with a calomel-glass electrode.

Reagents:
1. Deionized water.

Procedure:
1. Weigh 1.00 g ± 0.01 g of the Noveon® AA-1 polycarbophil to be tested into a weighing dish.
2. Measure 100 mL deionized water in a graduated cylinder and transfer to a 500 ml flask.
3. Transfer the sample from the weighing dish to the flask.
4. Cover the mouth of the flask with parafilm. Extend the parafilm down the neck of the flask and secure with a rubber band.
5. Place the flask on a mechanical shaker for one hour. Ensure contents are adequately mixed.
6. Transfer the contents of the flask to a 300 mL beaker.
7. Determine the pH of the dispersion with the pH meter equipped with a calomel-glass electrode.
8. Record the pH meter reading.

References:
• Current edition of the United States Pharmacopoeia/National Formulary (USP/NF)