

ISO 3473 “ Unplasticized Polyvinyl Chloride (PVC) Pipes ” Effect of Sulphuric Acid “ Requirement and Test Method “ Testing Equipment

Description

3 PRINCIPLE OF TEST

Determination of the change in mass of a test piece after immersion in sulphuric acid for a prescribed period.

4 REAGENT

Sulphuric acid, $\rho = 1.84 \text{ g/ml}$ ($93 \pm 0.5 \% \text{ (m/m)}$).

5 APPARATUS

5.1 Balance, accurate to 0.001 g.

5.2 Beaker, to contain both the test piece and the sulphuric acid.

5.3 Heating arrangement, to allow the temperature of the acid to be maintained at $55 \pm 2 \text{ C}$.

5.4 Device to prevent any increase in concentration of the contents of the beaker during the test (i.e. to prevent evaporation).

5.5 Device to keep the test piece completely submerged in the acid.

6 TEST PIECES

Take three test pieces from the pipe on which the effect of sulphuric acid is to be determined; each test piece shall have a total surface area of $45 \pm 3 \text{ cm}^2$.

7 PROCEDURE

Clean the test piece and then dry with filter paper.

Weigh the test piece to an accuracy of 0.001 g.

Submerge the test specimen in the beaker containing the sulphuric acid and maintain at $55 \pm 2 \text{ C}$.

Keep the beaker and its contents at this temperature for 14 days, taking care to prevent any increase in the acid concentration, for example by evaporation.

After 14 days immersion, remove the test piece from the beaker, wash it thoroughly with running water for 5 min, wipe it dry with filter paper and weigh it to an accuracy of 0.001 g.

Note the final increase or decrease in mass of the test piece. Proceed in the same manner for each of the three test pieces.

8 EXPRESSION OF RESULTS

Calculate the mean change in mass of the three test pieces to an accuracy of 0.001 g.

Category

1. Equipment for Standards
2. Standards

AHP PLASTIK MAKINA