

HS 3006 Acid Resistance Test

1. Purpose

Acid resistance of the container is tested by filling the container with acetic acid and checking for discoloration, distortion and leakage in the container after conditioning. The purpose of this test is to simulate the circumstance when the container is in contact with acidic foodstuffs.

2. Terminology

2.1 Disposable food /drink container

Containers of any shape are being used for temporary storage of food or beverage and disposed of after use.

3. Apparatus

3.1 Filter paper, large enough to cover the base area of the test specimen.

3.2 Slate plate, large enough for the filter paper to place on.

3.3 Acetic acid 3% (w/v) in aqueous solution

4. Procedures

4.1 Place a filter paper, followed by a specimen container on a slate plate.

4.2 Fill the container up to 80% of its capacity with acetic acid. Take care not to splash out any acid to the filter paper when filling the container (see Figure 1).

4.3 Condition the setup at $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ and $50\% \pm 5\%$ relative humidity for 2 hours.

4.4 After conditioning, pour out the acetic acid and check if there is any distortion, discoloration and defect of the container.

4.5 Check if there is any leakage mark on the filter paper.

4.6 For each sample, test three replicates.

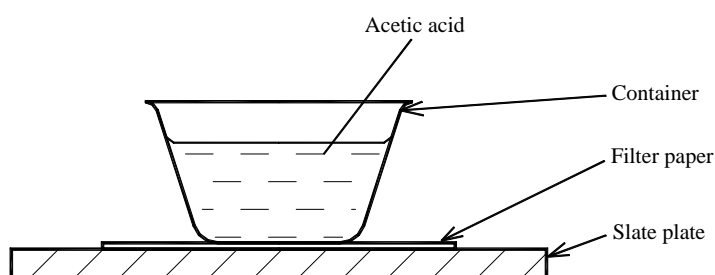


Figure 1: Schematic diagram to show the experimental setup.

5. Results

There should be no distortion, discoloration and defect of the three tested specimens. Leakage is also not allowed.

6. References

1. JIS S2029, Plastic Table Wares, Japanese Industrial Standards, Japanese Standards Association.
2. GB 18006.1-1999, General Specification for Single Use and Degradable Lunch Container and Drinking Set, China National Standards, China State Bureau of Quality and Technical Supervision (CSBTS).