SARTORIUS

Application Note

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Chemical Resistance to Ethanol| Sartorius Cubis® Balances – YSH Sample Holder

Test Report
Chemical Resistance to Ethanol Sartorius Cubis® Balances – YSH Sample Holders

Summary

The part surface of YSH sample holders have proven to be chemically stable to five cleaning procedures using 99.7% Ethanol. Neither the optical nor the mechanical properties of the tested surfaces changed during the test.

General information

Name	Company	Date
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Overview of the workflow

Products tested	Chemical used	Test duration	Temperature
YSH sample holders	99.7% Ethanol	15 min	23.5°C

1. Purpose

This document proves the testing of the part surfaces of YSH sample holders against 99.7% Ethanol. The purpose of this document is to categorize the chemical resistance of the tested surfaces.

2. Preparation

2.1 Test specimen

The YSH sample holder is disassembled into enable testing. Tests were performed always parallel to an untreated surface.

2.2 Chemical

99.7% Ethanol is decanted in a vial to provide an easier handling.

3. Execution

3.1 Cleaning procedure

99.7% Ethanol was sprayed on a lint-free wipe and the test surface was wiped. After 15 min the surface was wiped with a soft tissue to remove any residues.

Note: Avoid soaking the YSH sample holder or its parts in 99.7% Ethanol, otherwise the quality can not be guaranteed.

3.2 Determination

The test specimen was placed in a fume hood in a vertical position. Cleaning procedure was executed as described in chapter 3.1 and was repeated five times.

3.3 Evaluation

After the test, residues were removed under flowing water, dried and the surface was evaluated. Optical irregularities were checked and documented. Hardness of the tested surface was evaluated by using an indenter. Resistance to 99.7% Ethanol was claimed if no deviations compared to the control surface were found.

Figure 1: 99.7% Ethanol

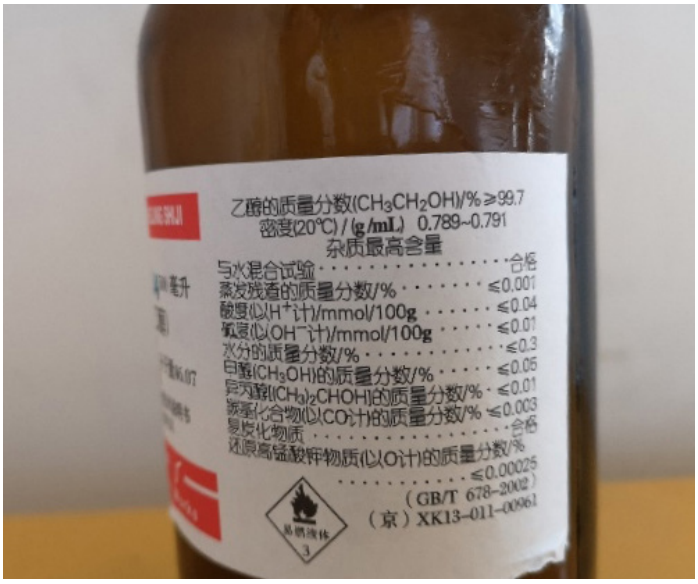
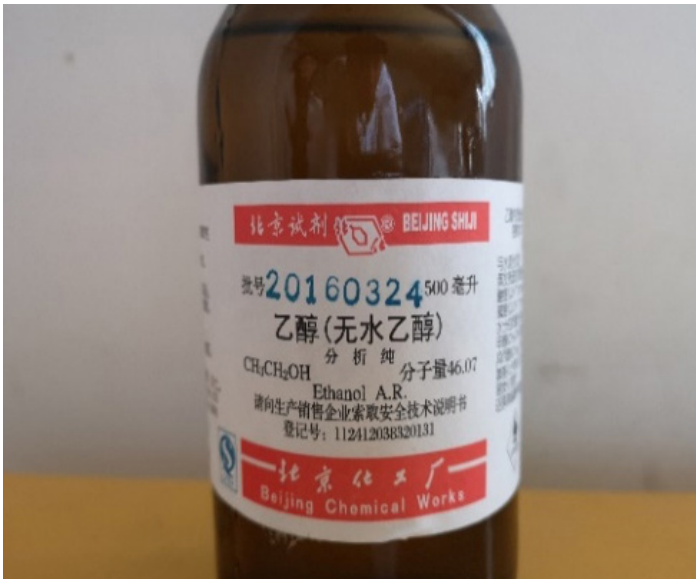


Figure 2: Composition of 99.7% Ethanol



4. Results

The surfaces to the left of the tape were tested with 99.7% Ethanol. The reference surface is on the right side of the test specimen.

4.1 YSH sample holders

4.1.1 Test images

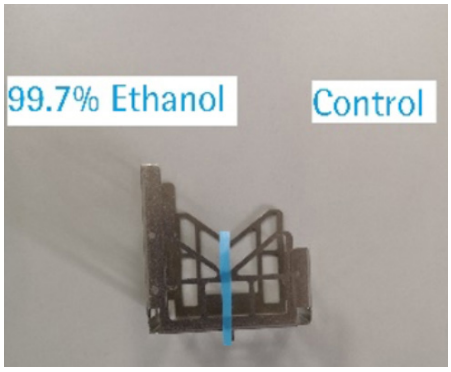


Figure 1: Vials holder

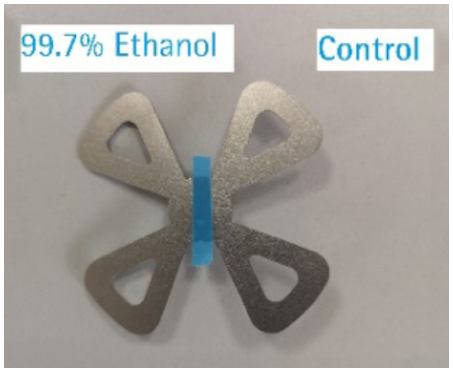


Figure 2: Filter pan holder 50mm

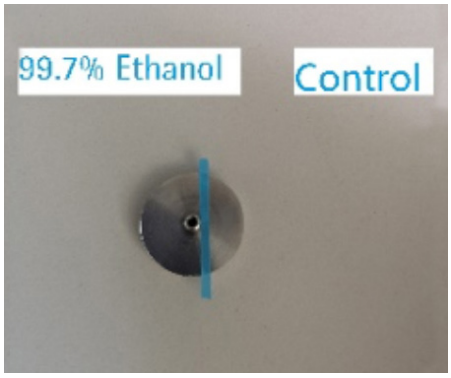


Figure 3: Pan bush

4.1.2 Evaluation

Test specimen	Optical properties	Mechanical properties
Vials holder	No irregularities	No irregularities
Filter pan holder 50mm	No irregularities	No irregularities
Pan bush	No irregularities	No irregularities

5. Summary

It has been proved that the surface of YSH sample holders are chemically stable after five above cleaning procedures. Neither the optical nor the mechanical properties of the tested surfaces changed during the test.

6. Disclaimer

These test results should be considered as a guidance rather than an unqualified guarante. The resistance of materials can be affected by concentration, temperature, presence of other chemicals, and other factors.

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