# Application Note



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#### Keywords or phrases:

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

# Test Report Chemical Resistance to Isopropanol 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 70% Isopropanol. Neither the optical nor the mechanical properties of the tested surfaces changed during the test.

#### General information

Name	Company	Date
Zhu Xiulin	Sartorius Scientific Instruments (Beijing) Co. Ltd	27. Juni 2019

#### Overview of the workflow

Products tested	Chemical used	Test duration	Temperature
YSH sample holders	70% Isopropanol	15 min	23.5°C

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## 1. Purpose

This document proves the testing of the part surfaces of YSH sample holders against 70% Isopropanol. 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

70% Isopropanol

### 3. Execution

#### 3.1 Cleaning procedure

70% Isopropanol 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 70% Isopropanol, 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 70% Isopropanol was claimed if no deviations compared to

Figure 1:70% Isopropanol



Figure 2: Composition of 70% Isopropanol

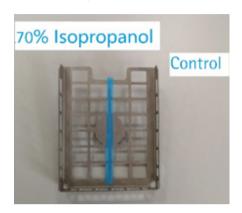


#### 4. Results

The surfaces to the left of the tape were tested with 70% Isopropanol. The reference surface is on the right side of the test specimen.

#### 4.1 YSH sample holders

#### 4.1.1 Test images





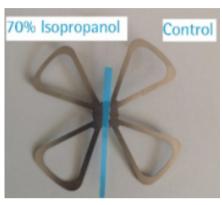


Figure 2: Filter pan holder 75mm

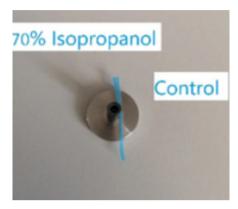


Figure 3: Pan bush

#### 4.1.2 Evaluation

Test specimen	Optical properties	Mechanical properties	
Weighing boats holder	No irregularities	No irregularities	
Filter pan holder 75mm	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 guarantee. The resistance of materials can be affected by concentration, temperature, presence of other chemicals, and other factors.

# Sales and Service Contacts

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