

# Certificate of Quality

<b>VWR Catalogue Number</b>	See List
<b>Description</b>	VWR® Two-Sided Disposable Plastic Cuvettes
<b>Country of Origin</b>	Manufactured in Germany
<b>Date of Issue (yyyy-mm-dd)</b>	2022-07-28

VWR Catalogue Number	Description	Volume range	Material
97000-590	Semi-Micro	1.5–3.0 mL	Acrylic (PMMA)
97000-586	Semi-Micro	1.5–3.0 mL	Polystyrene (PS)
97000-588	Macro	2.5–4.5 mL	Acrylic (PMMA)
97000-584	Macro	2.5–4.5 mL	Polystyrene (PS)

## Quality System Compliance

Products are manufactured under the **ISO 9001:2015** standard. Products are inspected and controlled through whole production processing in accordance with current applicable product specifications and QC SOP.

## QC Testing

Representative products samples are collected and inspected in accordance with current applicable product specifications.

### Dimensions

Cuvette	12.5 x 12.5 x 45 mm
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### Window

Macro cuvette	10 x 35 mm
Semi-micro cuvette	4.5 x 23 mm
Micro cuvette	2 x 3.5 mm (minimum)
Layer thickness	10 mm
Light path	10 mm

### Polystyrene cuvettes (PS)

Typical range of application: from 340 nm to 900 nm.
Standard deviation at 360 nm $\pm$ 0.005 extinction units.

### Poly (methyl methacrylate) cuvettes (PMMA)

Typical range of application: from 300 nm to 900 nm.
Standard deviation at 320 nm $\leq \pm 0.004$ extinction units.

### UV cuvettes

Typical range of application: from 200 nm to 900 nm.
Standard deviation at 240 nm $\leq \pm 0.007$ extinction units.
Standard deviation at 300 nm $\leq \pm 0.005$ extinction units.

Each case of disposable cuvettes contains cuvettes from one cavity of the injection mould to ensure minimal variations of extinction values. The number of cavity is displayed on each cuvette (e.g. S 224-1).

## Product Specifications

The external dimensions of the disposable macro cuvettes are according to DIN 58 963 part 3.

<b>Material</b>	Refer Table. The composition of the product complies with the requirements of the 21 CFR 177.1640 "Polystyrene and rubber modified polystyrene".
<b>Sterilization</b>	Product is non-sterile.
<b>ATP Assay</b>	No test performed.
<b>DNase &amp; RNase Free</b>	No test performed.
<b>BSE/TSE</b>	No use of any raw material produced from, or substances derived from animal origin. The manufacturing process of the product does not use any ingredient of animal origin and no material derived from or exposed to animals affected by or under quarantine for transmitting Animal Bovine Spongiform Encephalopathy/Spongiform Encephalopathy (BSE)/(TSE).
<b>Cytotoxicity</b>	Not applicable.
<b>Non-Pyrogenic Statement</b>	Not applicable.
<b>Latex Statement</b>	The product is Latex free.
<b>BPA Statement</b>	Bisphenols are not used in the manufacture of the raw material and are not expected to be present.
<b>DEHP Statement</b>	Please see RoHS information below.
<b>RoHS</b>	No substances (Lead, Cadmium, Mercury, Hexavalent Chromium (Cr <sup>6+</sup> ), Poly Brominated Biphenyls (PBB), Poly Brominated Diphenyl ethers (PBDE), Benzyl Butyl Phthalate (BBP), Dibutyl Phthalate (DBP), Diisobutyl Phthalate (DIBP), DEHP (di(2- ethylhexyl) phthalate)) are

used in manufacturing the raw materials and final product. No routinely analyse is performed.

**REACH Statement**

No substances as listed on >Substance of Very High Concern< candidate list published 2022-01-17 are used in manufacturing of the raw materials used to produce this product. No routinely analyse is performed.

**Storage Conditions**

Store at temperatures between 10°C and 50°C and at a relative humidity between 30 % and 65 % in the original packaging.

**Shelf Life**

5 years.

Disclaimer: VWR states that this declaration will not discharge the user from their obligation to ensure the product is suitable for the intended use. The purpose of the product is for use in laboratory only.  
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