

Certificate of Quality

VWR® STERILE 70% ISOPROPANOL

As per the manufacturer, the below product meets the following criteria:

| VWR Catalog Number: | 89108-160 |
|---------------------------|---|
| Lot Number: | 782016-0-0-1 |
| Description: | VWR IPA 70% 16OZ TRIGGER BOTTLE ST CS12 |
| Date of Manufacture: | July 15, 2020 |
| Expiration Date: | July 2023 |
| Sterilization Lot Number: | 2704434 |
| Specified Dosage (kGy): | Max: 50.0; Min: 25.0 |
| Delivered Dosage (kGy): | Max: 41.6; Min: 29.3 |
| Country of Origin: | USA |

Quality System Compliance

The above product was manufactured in accordance with prescribed procedures, specifications and under ISO 9001 standard.

QC Testing:

| Test | Specifications | Units | Results |
|------------------------------|-------------------------|----------------|---------|
| % IPA | 68.0 - 72.0 | % vol/vol | 70.019 |
| % DI WATER | 28.0 – 32.0 | % vol/vol | 29.981 |
| Acidity | ≤0.0018 | %wt | 0.0010 |
| Appearance | Clear, colorless liquid | Not applicable | PASS |
| Limit of Nonvolatile Residue | No more than 0.005 | g/50 mL | 0.000 |
| Odor | None | Not Applicable | PASS |
| Specific Gravity @ 20/20C | 0.872 - 0.883 | Not Applicable | 0.8762 |

^{*}Based on 100% IPA prior to blend.

Product Specifications:

Sterilization Process: The above product has been dosimetrically released as sterile. All aspects of the manufacturing process are within

specifications and the specified minimum dose has been delivered to the product. This is in accordance with procedures outlined in ANSI/AAMI/ISO 11137-2 Method VDmax: Sterilization of healthcare products – Requirements for validation

and routine control - Radiation Sterilization, to a Sterility Assurance Level of 10-6.

BSE/TSE Statement: This product is manufactured wholly from synthetic materials and do not contain any raw materials produced from or

substances derived of animal origin. The manufacturing process does not use any ingredient of animal origin, nor do the materials come into contact with animal products during storage and transportation. The products are free from

Transmissible Spongiform Encephalopathy (TSE) and Bovine Spongiform Encephalopathy (BSE).

Non-Pyrogenic: N/A

DNase & RNase Free: N/A

Cytotoxicity: N/A

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Latex Free: Latex or latex derivatives are not used in the production of this product.

Signed:

Jamie Ethier VP Global Quality VWR, Part of Avantor

Date: August 14, 2020