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Certificate of Analysis

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Isopropyl Alcohol, 70% (v/v)

Lot Number: 4807L09 Product Number: 4210

Manufacture Date: JUL 26, 2018

Expiration Date: JUL 2020

This product is intended for laboratory cleaning and disinfection purposes and is typically used for disinfection of surfaces. All components of this product are filtered as part of the manufacturing process. The residue after evaporation is typically 0.001% (10 ppm) maximum at the time of manufacturing. A culture/colony count of 1 CFU/mL, or less, is typical for the water at the time of manufacturing.

Name	CAS#	Grade
Isopropyl Alcohol	67-63-0	ACS/USP
Water	7732-18-5	ACS/ASTM/USP/EP

Test	Specification	Result
Appearance	Colorless liquid	Passed
Assay (by Specific Gravity)	68-72 % (v/v)	71 % (v/v)
Specific Gravity at 20°C	0.874-0.882	0.874

Volumetric glassware complies with Class A tolerance requirements of ASTM E 288 and NIST Circular 434; it is calibrated before first use and recalibrated regularly in accordance with ASTM E 542 and NIST Procedure NBSIR 74-461. Balances are calibrated regularly with weights certified traceable to the NIST national mass standard. Thermometers and temperature probes are calibrated before first use and recalibrated regularly with a thermometer traceable to NIST standards. All products are prepared according to master documents that assure manufacture according to validated methods. Batch records document raw material traceability and production and testing history for each lot manufactured.

Part Number	Size / Package Type	Shelf Life (Unopened Container)
4210-1	4 L natural poly	24 months
4210-32	1 L natural poly	24 months
4210-5	20 L Cubitainer®	24 months

Recommended Storage: $15^{\circ}\text{C} - 30^{\circ}\text{C} (59^{\circ}\text{F} - 86^{\circ}\text{F})$

Jim Gibbs (07/26/2018)

Quality Control Supervisor

This Certificate of Analysis is designed to comply with ISO Guide 31 "Reference Materials -- Contents of Certificates and Labels."

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