

## **Certificate of Analysis**

## Sulfuric Acid, 20% (v/v), Reagent Grade

| Lot Number: 4304F24 Product Nu               | mber: 8165          |                 | Date: APR 10, 2023<br>ion Date: MAR 2026 |
|--|---------------------|-----------------|--|
| Name   | CAS#                | Grade           |  |
| Water  | 7732-18-5           | ACS/ASTM/USP/EP |  |
| Sulfuric Acid                                | 7664-93-9           | Reagent         |  |
| Test   | Specification       | Result          | NIST SRM#                                |
| Appearance                                   | Colorless liquid    | Passed          |  |
| Assay (vs. Sodium Hydroxide/Phenolphthalein) | 19.97-20.03 % (v/v) | 20.03 % (v/v)   | 84                                       |
| Specification                                | Re                  | ference         |  |
| Sulfuric acid, 20% by volume                 | TAPPI (T 624 cm-85) |                 |  |
| Sulfuric Acid (1:4)                          | EPA (330.3)         |                 |  |
| Sulfuric Acid Solution (1:4)                 | EPA (320.1)         |                 |  |
| Sulfuric Acid (1+4)                          | ASTM (D 128)        |                 |  |
| Sulfuric Acid (1:4)                          | EPA (330.1)         |                 |  |

Sulfuric Acid Solution (1:4) 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.

EPA (330.2)

| Part Number | Size / Package Type | Shelf Life (Unopened Container) |  |  |
|-------------|---------------------|---------------------------------|--|--|
| 8165-1      | 4 L natural poly    | 36 months                       |  |  |
| 8165-32     | 1 L natural poly    | 36 months                       |  |  |
|             |                     |                                 |  |  |

Recommended Storage: 15°C - 30°C (59°F - 86°F)

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Sulfuric Acid Solution (1:4)

Paul Brandon (04/10/2023) Production Manager This document is designed to comply with ISO Guide 31 "Reference Materials --Contents of Certificates and Labels."

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