

# Certificate of Analysis

## Sodium Hydroxide, 10.0 Normal

**Lot Number:** 4308T54

**Product Number:** 7470

**Manufacture Date:** SEP 06, 2023

**Expiration Date:** AUG 2025

| Name             | CAS#      | Grade           |
|------------------|-----------|-----------------|
| Water            | 7732-18-5 | ACS/ASTM/USP/EP |
| Sodium Hydroxide | 1310-73-2 | Reagent         |

| Test                                      | Specification        | Result         | NIST SRM# |
|---|----------------------|----------------|-----------|
| Appearance                                | Colorless liquid     | Passed         |           |
| Assay (vs. Sulfuric Acid/Phenolphthalein) | 9.95-10.05 N at 20°C | 9.98 N at 20°C | 723       |
| Heavy Metals (as Pb)                      | max 10 ppm           | < 10 ppm       |           |
| Iron (Fe)                                 | max 5 ppm            | < 5 ppm        | 3126      |

| Specification                          | Reference            |
|--|----------------------|
| Sodium hydroxide Solution (400 g/L)    | ASTM (D 3590 A)      |
| Sodium Hydroxide Solution (400 g/L)    | ASTM (D 1426 B)      |
| Sodium Hydroxide, 10 N                 | APHA (4500-NH3 D)    |
| Sodium Hydroxide, 10 N                 | APHA (4500-CN- L)    |
| Sodium Hydroxide Stock Solution        | APHA (4500-NO3- H)   |
| Sodium Hydroxide, 10 N                 | APHA (7500-Ra D)     |
| ISA Solution (10 M NaOH)               | EPA (SW-846) (9213)  |
| Sodium Hydroxide Solution (10 N)       | EPA (SW-846) (3510C) |
| Sodium Hydroxide Solution (10 N)       | EPA (SW-846) (3520C) |
| Sodium Hydroxide (10 N)                | EPA (SW-846) (3650B) |
| Sodium Hydroxide Solution (10 N)       | EPA (SW-846) (3535)  |
| Sodium Hydroxide Solution (10 Molar)   | EPA (SW-846) (3542)  |
| Sodium Hydroxide, 10 N                 | EPA (350.3)          |
| Sodium Hydroxide, 10 N                 | EPA (351.4)          |
| Sodium Hydroxide Stock Solution (10 N) | EPA (353.1)          |
| Sodium Hydroxide, 10 N                 | EPA (110.1)          |

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) |
|-------------|---------------------|---------------------------------|
| 7470-1      | 4 L natural poly    | 24 months                       |
| 7470-2.5    | 10 L Cubitainer®    | 24 months                       |
| 7470-32     | 1 L natural poly    | 24 months                       |

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



Paul Brandon (09/06/2023)

Production Manager

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

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