



# Certificate of Analysis

Raeyco Lab Equipment Management  
Systems Ltd.  
4288 Lozells Avenue, Suite 205  
Burnaby, BC V5A 0C7  
CANADA  
1-877-772-3926 (877-7-RAEYCO)  
www.raeyco.com

## gopHer Buffer Kit

Lot Number: GOPHERBK    Product Number: GOPHERBK

Expiration Date: FEB 2025

Consult the individual product lot Certificates of Analysis for specifications and test results.

Kit Component Part Number	Kit Component Lot Number	Kit Component Product Name
GOPHERBA	GOPHERBA	Buffer A
GOPHERBB	GOPHERBB	Buffer B
GOPHERQC	GOPHERQC	Buffer Quality Check

Conductivity and pH measurements were performed in our Arlington, TX, Pocomoke City, MD, or Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. 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)
GOPHERBK-250	1 kit of 250 mL bottles	24 months

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

Paul Brandon

Production Manager

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



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## Buffer A

Lot Number: GOPHERBA      Product Number: GOPHERBA

Manufacture Date: FEB 27, 2023

Expiration Date: FEB 2025

Use product within 3 months of opening, but not exceeding the expiration date.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Preservative	Proprietary	

Test	Specification	Result
Appearance	Colorless Liquid	Passed
pH at 25°C (Method: SQCP027, SQCP033)	± 0.002 pH of the expected value	Passed

Conductivity and pH measurements were performed in our Arlington, TX, Pocomoke City, MD, or Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. 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)
GOPHERBA-250G	250 mL clear PET	24 months

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

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**This product was tested in an ISO 17025 Accredited Laboratory**



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## Buffer B

Lot Number: GOPHERBB    Product Number: GOPHERBB

Manufacture Date: FEB 27, 2023

Expiration Date: FEB 2025

Use product within 3 months of opening, but not exceeding the expiration date.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS

Test	Specification	Result
Appearance	Colorless Liquid	Passed
pH at 25°C (Method: SQCP027, SQCP033)	± 0.005 pH of the expected value	Passed

Conductivity and pH measurements were performed in our Arlington, TX, Pocomoke City, MD, or Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. 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)
GOPHERBB-250G	250 mL clear PET	24 months

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

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## Buffer Quality Check

Lot Number: GOPHERQC    Product Number: GOPHERQC

Manufacture Date: FEB 27, 2023

Expiration Date: FEB 2025

Use product within 3 months of opening, but not exceeding the expiration date.

Name	CAS#	Grade
Water	7732-18-5	ACS/ASTM/USP/EP
Sodium Phosphate Dibasic	7558-79-4	ACS
Potassium Dihydrogen Phosphate	7778-77-0	ACS
Sodium Azide	26628-22-8	Reagent

Test	Specification	Result
Appearance	Colorless Liquid	Passed
pH at 25°C (Method: SQCP027, SQCP033)	± 0.002 pH of the expected value	Passed

Conductivity and pH measurements were performed in our Arlington, TX, Pocomoke City, MD, or Batesville, IN laboratory under ISO/IEC 17025 accreditation (ANAB Certificate L2387) and are certified traceable to National Institute of Standards and Technology (NIST) Standard Reference Material as indicated above via an unbroken chain of comparisons. The uncertainty is calculated from the uncertainty of the measurement variation from sample to sample, the uncertainty in the NIST Standard Reference Material, and the uncertainty of the measurement process. The uncertainty is multiplied by k=2, corresponding to 95% coverage in a normal distribution. 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)
GOPHERQC-250G	250 mL clear PET	24 months

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

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