

### Prep Standard - Chemical Standard Summary

**Order ID :** Q1775

**Test :** Percent Solids, TOC

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** LB135408,

**Standard ID :**

WP111436, WP111437, WP112403, WP112404, WP112405, WP112406, WP112407, WP112408, WP112446, WP112697,

**Chemical ID :**

W2784, W2860, W3112, W3169,



<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2050	TOC STOCK STD, 4000PPM	<a href="#">WP111436</a>	01/15/2025	07/15/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/16/2025
<b><u>FROM</u></b> 5.00000ml of W2860 + 8.51200gram of W3169 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2051	TOC STOCK STD-SS, 4000PPM	<a href="#">WP111437</a>	01/15/2025	06/30/2025	Niha Farheen Shaik	WETCHEM_SCALE_5 (WC)	WETCHEM_PIPETTE_3 (WC)	Iwona Zarych 01/16/2025
<u>FROM</u>	5.00000ml of W2860 + 8.51200gram of W2784 + 990.00000ml of W3112 = Final Quantity: 1000.000 ml							

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
304	TOC CAL 0.00ppm	<a href="#">WP112403</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	None	Iwona Zarych 03/20/2025

**FROM** 100.00000ml of W3112 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
712	TOC SOIL cal 250ppm	<a href="#">WP112404</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 03/20/2025

**FROM** 15.00000ml of W3112 + 1.00000ml of WP111436 = Final Quantity: 16.000 ml

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
710	TOC SOIL cal 500ppm	<a href="#">WP112405</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	WETCHEM_FIPETTE_3 (WC)	Iwona Zarych 03/20/2025

**FROM** 14.00000ml of W3112 + 2.00000ml of WP111436 = Final Quantity: 16.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3544	TOC SOIL Cal- CCV 1000PPM	<a href="#">WP112406</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/20/2025

**FROM** 15.00000ml of W3112 + 5.00000ml of WP111436 = Final Quantity: 20.000 ml

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
713	TOC SOIL cal 2000ppm	<a href="#">WP112407</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/20/2025

**FROM** 5.00000ml of W3112 + 5.00000ml of WP111436 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2819	TOC ICV-LCSS, 1000PPM	<a href="#">WP112408</a>	03/14/2025	03/21/2025	Niha Farheen Shaik	None	Glass Pipette-A	Iwona Zarych 03/20/2025

**FROM** 15.00000ml of W3112 + 5.00000ml of WP111437 = Final Quantity: 20.000 ml

## Wet Chemistry STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
613	Phosphoric acid reagent	<a href="#">WP112446</a>	03/25/2025	09/25/2025	Niha Farheen Shaik	None	None	Iwona Zarych
								03/26/2025

**FROM** 150.00000ml of W3112 + 50.00000ml of W2860 = Final Quantity: 200.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3544	TOC SOIL Cal- CCV 1000PPM	<a href="#">WP112697</a>	04/14/2025	04/21/2025	Iwona Zarych	None	Glass Pipette-A	Jignesh Parikh
								04/16/2025

**FROM** 15.00000ml of W3112 + 5.00000ml of WP111436 = Final Quantity: 20.000 ml

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	201089	06/30/2025	12/23/2020 / apatel	12/16/2020 / apatel	W2784

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	J0260-3 / Phosphoric Acid, 2.5 L	0000278313	01/31/2026	07/12/2021 / apatel	07/12/2021 / apatel	W2860

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / lwona	07/03/2024 / lwona	W3112

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	P243-500 / Potassium Hydrogen Phthalate, 500 gms	24H0956262	04/28/2026	01/03/2025 / lwona	01/03/2025 / lwona	W3169

Phosphoric Acid  
BAKER ANALYZED® A.C.S. Reagent

(orthophosphoric acid)



Material No.: 0260-03  
Batch No.: 0000278313  
Manufactured Date: 2021/02/01  
Retest Date: 2026/01/31  
Revision No: 2

## Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

Test	Specification	Result
Assay ( $\text{H}_3\text{PO}_4$ ) (by acidimetry)	85.0 – 87.0 %	85.8
Calcium (Ca)	$\leq 0.002 \%$	$< 0.001$
Color (APHA)	$\leq 10$	5
Insoluble Matter	$\leq 0.001 \%$	$< 0.001$
ACS – Magnesium (Mg)	$\leq 0.002 \%$	$< 0.002$
Sulfate ( $\text{SO}_4$ )	$\leq 12 \text{ ppm}$	$< 4$
Volatile Acids (as $\text{CH}_3\text{COOH}$ )	$\leq 0.001 \%$	0.001
Reducing Substances	Passes Test	PT
Chloride (Cl)	$\leq 3 \text{ ppm}$	$< 1$
Nitrate ( $\text{NO}_3$ )	$\leq 5 \text{ ppm}$	$< 2$
Trace Impurities – Antimony (Sb)	$\leq 20.000 \text{ ppm}$	0.007
Trace Impurities – Arsenic (As)	$\leq 0.500 \text{ ppm}$	$< 0.001$
Trace Impurities – Iron (Fe)	$\leq 10.000 \text{ ppm}$	$< 1.000$
Heavy Metals (as Pb)	$\leq 8 \text{ ppm}$	$< 3$
Trace Impurities – Manganese (Mn)	$\leq 0.500 \text{ ppm}$	0.005
Trace Impurities – Potassium (K)	$\leq 40.000 \text{ ppm}$	$< 0.001$
Trace Impurities – Sodium (Na)	$\leq 200.000 \text{ ppm}$	0.082

For Laboratory, Research or Manufacturing Use

Exceeds A.C.S. Specifications

Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC

  
Jamie Ethier  
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700  
Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



Certificate of Analysis

**ThermoFisher**  
SCIENTIFIC

## Certificate of Analysis

1 Reagent Lane

Fair Lawn, NJ 07410

201.796.7100 tel

201.796.1329 fax

Thermo Fisher Scientific's Quality System has been found to conform to Quality Management System  
Standard ISO9001:2015 by SAI Global Certificate Number CERT – 0120632

This is to certify that units of the lot number below were tested and found to comply with the specifications of the grade listed. Certain data have been supplied by third parties. Thermo Fisher Scientific expressly disclaims all warranties, expressed or implied, including the implied warranties of merchantability and fitness for a particular purpose. Products are for research use or further manufacturing. Not for direct administration to humans or animals. It is the responsibility of the final formulator and end user to determine suitability based upon the intended use of the end product. Products are tested to meet the analytical requirements of the noted grade. The following information is the actual analytical results obtained.

Catalog Number	P243	Quality Test / Release Date	06/19/2020
Lot Number	201089		
Description	POTASSIUM HYDROGEN PHTHALATE, ACIDIMETRIC STANDARD, A.C.S.		
Country of Origin	Spain	Suggested Retest Date	Jun/2025
Chemical Origin	Organic - non animal		
BSE/TSE Comment	No animal products are used as starting raw material ingredients, or used in processing, including lubricants, processing aids, or any other material that might migrate to the finished product.		

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE CRYSTALS
ASSAY POTASSIUM HYDROGEN PHTHALATE	%	Inclusive Between 99.95 - 100.05	100.03
CHLORINE COMPOUNDS	%	<= 0.003	<0.003
HEAVY METALS (as Pb)	ppm	<= 5	<5
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.005	<0.005
IRON (Fe)	ppm	<= 5	<5
PH OF 0.05M SOLUTION		Inclusive Between 4.00 - 4.02	4.00
SODIUM (Na)	%	<= 0.005	<0.005
SULFUR COMPOUNDS	%	<= 0.002	<0.002%
TRACEABLE TO NIST	SOD CARBONATE	= LOT 351a	351a
TRACEABLE TO NIST KHP STD	POT. ACID PHTHALATE	= LOT 84L	84L



Julian Burton - Quality Control Manager – Fair Lawn

Note: The data listed is valid for all package sizes of this lot of this product, expressed as an extension of this catalog number listed above.  
If there are any questions with this certificate, please call at (800) 227-6701.

\*Based on suggested storage condition.



Material	BDH9260-500G
Material Description	BDH POTASS HYDRGN PHTHLTE 500G
Grade	ACS GRADE
Batch	24H0956262
Reassay Date	04/28/2026
CAS Number	877-24-7
Molecular Formula	HOCC6H4COOK
Molecular Mass	204.22
Date of Manufacture	04/29/2023
Storage	Room Temperature

Characteristics	Specifications	Measured Values
Appearance	White crystals.	White crystals.
Assay (dried basis)	99.95 - 100.05 %	99.98 %
Chlorine Compounds	<= 0.003 %	<0.003 %
Heavy Metals (as Pb)	<= 5 ppm	<5 ppm
Insoluble Matter	<= 0.005 %	0.003 %
Iron	<= 5 ppm	<5 ppm
pH (0.05M, Water) @25C	4.00 - 4.02	4.00
Sodium	<= 0.005 %	<0.005 %
Sulfur Compounds	<= 0.002 %	<0.002 %

Internal ID #: 322

Signature	Additional Information
<p>We certify that this batch conforms to the specifications listed above.</p> <p>This document has been electronically produced and is valid without a signature.</p> <p>Leona Edwardson, Quality Control Sr. Manager - Solon VWR Chemicals, LLC. 28600 Fountain Parkway, Solon OH 44139 USA</p>	<p>Analysis may have been rounded to significant digits in specification limits</p> <p>Product meets analytical specifications of the grades listed.</p>