

## Prep Standard - Chemical Standard Summary

**Order ID :** Q3510

**Test :** COD,Oil and Grease

**Prepbatch ID :**

**Sequence ID/Qc Batch ID:** LB137760, LB137814,

**Standard ID :**

EP2655, WP114652, WP114653, WP114654, WP114655, WP114656, WP114657, WP114658, WP114659, WP114661, WP115016, WP115017, WP115018, WP115434, WP115435, WP115436, WP115437, WP115438, WP115439, WP115440,

**Chemical ID :**

E3875, E3972, M6069, M6151, W2817, W2871, W3009, W3082, W3112, W3169, W3219, W3230, W3240,



| <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>            |
|----------------------------------------------------------------------------|----------------------|------------------------|------------------|------------------------|--------------------|---------------------------------|------------------|---------------------------------|
| 3923                                                                       | Baked Sodium Sulfate | <a href="#">EP2655</a> | 10/24/2025       | 01/28/2026             | RUPESHKUMAR SHAH   | Extraction_SCALE_2<br>(EX-SC-2) | None             | Riteshkumar Patel<br>10/24/2025 |
| <b><u>FROM</u></b> 4000.00000gram of E3875 = Final Quantity: 4000.000 gram |                      |                        |                  |                        |                    |                                 |                  |                                 |

| <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> |
|---------------------------------------------------------------------------------------------|------------------------|--------------------------|------------------|------------------------|--------------------|------------------------|------------------|----------------------|
| 2456                                                                                        | COD Stock std, 1000ppm | <a href="#">WP114652</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | WETCHEM_SCALE_5 (WC-5) | None             | Jignesh Parikh       |
| <b><u>FROM</u></b> 0.08500gram of W3219 + 100.00000ml of W3112 = Final Quantity: 100.000 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>             |
|------------------|---------------------------|--------------------------|------------------|------------------------|--------------------|----------------------------------|------------------|----------------------------------|
| 2457             | COD Stock std-SS, 1000ppm | <a href="#">WP114653</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | WETCHEM_S<br>CALE_5 (WC<br>SC-5) | None             | Jignesh Parikh<br><br>09/11/2025 |

**FROM** 0.08500gram of W3169 + 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>             |
|------------------|----------------------------|--------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------------------|
| 139              | COD calibration std. 0 ppm | <a href="#">WP114654</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | None             | Jignesh Parikh<br><br>09/11/2025 |

**FROM** 10.00000ml of W3112 = 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>         |
|------------------|------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|------------------------------|
| 138              | COD calibration std. 10 ppm                                            | <a href="#">WP114655</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_PIPETTE_3<br>(WC) | Jignesh Parikh<br>09/11/2025 |
| <u>FROM</u>      | 9.90000ml of W3112 + 0.10000ml of WP114652 = 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>         |
|-------------------------------------------------------------------------------------------|-----------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|------------------------------|
| 137                                                                                       | COD calibration std. 50 ppm | <a href="#">WP114656</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_PIPETTE_3<br>(WC) | Jignesh Parikh<br>09/11/2025 |
| <b><u>FROM</u></b> 9.50000ml of W3112 + 0.50000ml of WP114652 = 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> |
|------------------|------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|-------------------|----------------------|
| 4161             | COD calibration std. 75 ppm                                            | <a href="#">WP114657</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_PIPETTE_3 | Jignesh Parikh       |
| (WC)             |                                                                        |                          |                  |                        |                    |                |                   |                      |
| <u>FROM</u>      | 9.25000ml of W3112 + 0.75000ml of WP114652 = 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>         |
|-------------------------------------------------------------------------------------------|------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|------------------------------|
| 136                                                                                       | COD calibration std. 100 ppm | <a href="#">WP114658</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_FIPETTE_3<br>(WC) | Jignesh Parikh<br>09/11/2025 |
| <b><u>FROM</u></b> 9.00000ml of W3112 + 1.00000ml of WP114652 = 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>         |
|------------------|------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|------------------------------|
| 135              | COD calibration std. 150 ppm                                           | <a href="#">WP114659</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_PIPETTE_3<br>(WC) | Jignesh Parikh<br>09/11/2025 |
| <u>FROM</u>      | 8.50000ml of W3112 + 1.50000ml of WP114652 = 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>         |
|-------------------------------------------------------------------------------------------|------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|------------------------------|
| 2459                                                                                      | COD ICV-LCS std, 50ppm | <a href="#">WP114661</a> | 09/08/2025       | 09/15/2025             | Iwona Zarych       | None           | WETCHEM_PIPETTE_3<br>(WC) | Jignesh Parikh<br>09/11/2025 |
| <b><u>FROM</u></b> 9.50000ml of W3112 + 0.50000ml of WP114653 = Final Quantity: 10.000 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> |
|------------------|-------------|--------------------------|------------------|------------------------|--------------------|----------------|------------------|----------------------|
| 229              | 1:1 HCL     | <a href="#">WP115016</a> | 10/02/2025       | 02/17/2026             | Jignesh Parikh     | None           | None             | Iwona Zarych         |
|                  |             |                          |                  |                        |                    |                |                  | 10/02/2025           |

**FROM** 500.00000ml of M6151 + 500.00000ml of W3112 = Final Quantity: 1.000 L

| <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> |
|------------------|--------------------|--------------------------|------------------|------------------------|--------------------|----------------------------------|------------------|----------------------|
| 2470             | 1664A SPIKING SOLN | <a href="#">WP115017</a> | 10/02/2025       | 04/02/2026             | Jignesh Parikh     | WETCHEM_S<br>CALE_7 (WC<br>SC-6) | None             | Iwona Zarych         |
|                  |                    |                          |                  |                        |                    |                                  |                  | 10/02/2025           |

**FROM** 1000.00000ml of E3972 + 4.00000gram of W2817 + 4.00000gram of W2871 = 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>       |
|------------------|---------------------------------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|-------------------------|------------------|----------------------------|
| 3374             | 1664A QCS spiking solution-SS                                                                     | <a href="#">WP115018</a> | 10/02/2025       | 04/02/2026             | Jignesh Parikh     | WETCHEM_SCALE_7 (WCS-6) | None             | Iwona Zarych<br>10/02/2025 |
| <u>FROM</u>      | 1000.00000ml of E3972 + 4.00000gram of W3009 + 4.00000gram of W3082 = 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>       |
|------------------|--------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|---------------------------|------------------|----------------------------|
| 2456             | COD Stock std, 1000ppm                                                   | <a href="#">WP115434</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | WETCHEM_SCALE_5 (WC SC-5) | None             | Iwona Zarych<br>11/05/2025 |
| <u>FROM</u>      | 0.08500gram of W3169 + 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>       |
|------------------|--------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|-------------------------|------------------|----------------------------|
| 2457             | COD Stock std-SS, 1000ppm                                                | <a href="#">WP115435</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | WETCHEM_SCALE_5 (WCS-5) | None             | Iwona Zarych<br>11/05/2025 |
| <u>FROM</u>      | 0.08500gram of W3219 + 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>       |
|--------------------------------------------------------------------------------------------|-------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|----------------------------|
| 3580                                                                                       | COD LOD std, 5ppm | <a href="#">WP115436</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | None           | WETCHEM_PIPETTE_3<br>(WC) | Iwona Zarych<br>11/05/2025 |
| <b><u>FROM</u></b> 49.75000ml of W3112 + 0.25000ml of WP115434 = Final Quantity: 50.000 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> |
|------------------|-------------------------------------------------------------------------|--------------------------|------------------|------------------------|--------------------|----------------|-------------------|----------------------|
| 2069             | COD LOQ std, 10.0PPM                                                    | <a href="#">WP115437</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | None           | WETCHEM_PIPETTE_3 | Iwona Zarych         |
| (WC)             |                                                                         |                          |                  |                        |                    |                |                   |                      |
| <u>FROM</u>      | 49.50000ml of W3112 + 0.50000ml of WP115435 = Final Quantity: 50.000 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>       |
|-------------------------------------------------------------------------------------------|--------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|----------------------------|
| 2458                                                                                      | COD CCV std, 50ppm | <a href="#">WP115438</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | None           | WETCHEM_PIPETTE_3<br>(WC) | Iwona Zarych<br>11/05/2025 |
| <b><u>FROM</u></b> 9.50000ml of W3112 + 0.50000ml of WP115434 = 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>       |
|-------------------------------------------------------------------------------------------|------------------------|--------------------------|------------------|------------------------|--------------------|----------------|---------------------------|----------------------------|
| 2459                                                                                      | COD ICV-LCS std, 50ppm | <a href="#">WP115439</a> | 11/04/2025       | 11/11/2025             | Eman Mughal        | None           | WETCHEM_PIPETTE_3<br>(WC) | Iwona Zarych<br>11/05/2025 |
| <b><u>FROM</u></b> 9.50000ml of W3112 + 0.50000ml of WP115435 = 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> |
|--------------------|-------------|------------------------------------------------------------------------|------------------|------------------------|--------------------|----------------|-------------------|----------------------|
| 4162               | RL CHECK    | <a href="#">WP115440</a>                                               | 11/04/2025       | 11/11/2025             | Eman Mughal        | None           | WETCHEM_PIPETTE_3 | Iwona Zarych         |
| <b><u>FROM</u></b> |             | 9.90000ml of W3112 + 0.10000ml of WP115434 = Final Quantity: 10.000 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. | PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1 | 417203 | 07/28/2026      | 07/28/2025 / RUPESH     | 01/29/2025 / Rajesh         | E3875          |

| Supplier         | ItemCode / ItemName                        | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|--------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9254-03 / Acetone, Ultra Resi (cs/4x4L) | 24H1462005 | 05/24/2027      | 09/16/2025 / Evelyn     | 09/04/2025 / Riteshkumar    | E3972          |

| Supplier                    | ItemCode / ItemName                          | Lot #   | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|----------------------------------------------|---------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | 140440 / TEST PAPERS,PH,0-2.5,.2SENSI, 100PK | 80A0441 | 02/29/2028      | 09/03/2024 / jignesh    | 08/19/2024 / Jaswal         | M6069          |

| Supplier         | ItemCode / ItemName                                         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-------------------------------------------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | BA-9530-33 / Hydrochloric Acid, Instra-Analyzed (cs/6x2.5L) | 22G2862015 | 02/17/2026      | 02/18/2025 / Sagar      | 01/15/2025 / Sagar          | M6151          |

| Supplier                    | ItemCode / ItemName               | Lot #   | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|-----------------------------------|---------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | A12244 / Stearic acid, 98%, 100 g | U20E006 | 04/02/2026      | 04/02/2021 / apatel     | 04/02/2021 / apatel         | W2817          |

| Supplier         | ItemCode / ItemName         | Lot #      | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-----------------------------|------------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | H223-57 / Hexadecane, 99.0% | 0000266903 | 05/04/2027      | 09/07/2021 / apatel     | 08/26/2021 / apatel         | W2871          |

## CHEMICAL RECEIPT LOG BOOK

| Supplier         | ItemCode / ItemName         | Lot #    | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|------------------|-----------------------------|----------|-----------------|-------------------------|-----------------------------|----------------|
| Seidler Chemical | H223-57 / Hexadecane, 99.0% | SHBP8192 | 02/27/2028      | 02/27/2023 / lwona      | 02/27/2023 / lwona          | W3009          |

| Supplier                    | ItemCode / ItemName               | Lot #   | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|-----------------------------|-----------------------------------|---------|-----------------|-------------------------|-----------------------------|----------------|
| PCI Scientific Supply, Inc. | A12244 / Stearic acid, 98%, 100 g | U23E020 | 02/26/2029      | 02/26/2024 / lwona      | 02/26/2024 / lwona          | W3082          |

| 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          |

| 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 | 2025040493 | 06/30/2030      | 06/26/2025 / lwona      | 06/26/2025 / lwona          | W3219          |

| Supplier                  | ItemCode / ItemName                             | Lot #   | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---------------------------|-------------------------------------------------|---------|-----------------|-------------------------|-----------------------------|----------------|
| Environmental Express LTD | B1010 / COD Digestion Vials Low Level 0-150Mg/L | 5GE0517 | 05/31/2030      | 10/03/2025 / lwona      | 07/11/2025 / lwona          | W3230          |

**CHEMICAL RECEIPT LOG BOOK**

| Supplier         | ItemCode / ItemName                          | Lot #      | Expiration Date | Date Opened /<br>Opened By | Received Date /<br>Received By | Chemtech<br>Lot # |
|------------------|----------------------------------------------|------------|-----------------|----------------------------|--------------------------------|-------------------|
| Seidler Chemical | BA-9262-03 / Hexane,<br>Ultra-Resi (cs/4x4L) | 25C0362006 | 04/30/2026      | 09/15/2025 /<br>JIGNESH    | 09/12/2025 /<br>JIGNESH        | W3240             |

Hexadecane, 99.0%



Material No.: H223-57  
Batch No.: 0000266903  
Manufactured Date: 2020/05/05  
Retest Date: 2027/05/04  
Revision No: 1

## Certificate of Analysis

| Test                                                         | Specification  | Result |
|--------------------------------------------------------------|----------------|--------|
| Assay ( $\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$ ) (by GC) | $\geq 99.0 \%$ | 99.3   |
| Infrared Spectrum                                            | Passes Test    | PT     |

For Laboratory, Research or Manufacturing Use

Country of Origin: US  
Packaging Site: Paris 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

**Product Name:** Stearic acid, 98%, Thermo Scientific Chemicals  
**Catalog Number:** A12244.14

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**CAS Number:** 57-11-4  
**Molecular Formula:** C<sub>18</sub>H<sub>36</sub>O<sub>2</sub>  
**Molecular Weight:** 284.48  
**InChI Key:** QIQXTHQIDYTRH-UHFFFAOYSA-N  
**SMILES:** CCCCCCCCCCCCCCCC(O)=O  
**Synonym:** stearic acid acide stearique hydrofol acid 1855 hydrofol acid 1655 industrene 5016  
stearic acid, ion(1-) (8Cl) glycon TP glycon DP acidum stearinicum hydrofol acid 150

### Product Specification

**Appearance (Color):** White  
**Form:** Crystals or powder or crystalline powder or flakes or waxy solid  
**Assay (Silylated GC):** ≥97.5%  
**Melting Point (clear melt):** 67.0-74.0°C

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**Date Of Print:** 11/30/2023

*Product Specifications are subject to amendment and may change over time. Data contained is accurate as of the date printed.*

W3009  
rec. 2/27/2023 12

Product Name:

Hexadecane - ReagentPlus®, 99%

## Certificate of Analysis

Product Number:

H6703

Batch Number:

SHBP8192

 $\text{CH}_3(\text{CH}_2)_{14}\text{CH}_3$ 

Brand:

SIAL

CAS Number:

544-76-3

MDL Number:

MFCD00008998

Formula:

C16H34

Formula Weight:

226.44 g/mol

Quality Release Date:

04 AUG 2022

| Test                       | Specification         | Result    |
|----------------------------|-----------------------|-----------|
| Appearance (Color)         | Colorless or White    | Colorless |
| Appearance (Form)          | Liquid or Solid       | Liquid    |
| Infrared Spectrum          | Conforms to Structure | Conforms  |
| Refractive index at 20 ° C | 1.432 - 1.436         | 1.435     |
| Purity (GC)                | ≥ 98.5 %              | 99.3 %    |
| Color Test                 | ≤ 20 APHA             | < 5 APHA  |

  
Larry Coers, Director

Quality Control

Sheboygan Falls, WI US

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.





**PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.**

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# CERTIFICATE OF ANALYSIS

|                       |                                   |               |                                 |
|-----------------------|-----------------------------------|---------------|---------------------------------|
| PRODUCT :             | SODIUM SULFATE CRYSTALS ANHYDROUS |               |                                 |
| QUALITY :             | ACS (CODE RMB3375)                | FORMULA :     | Na <sub>2</sub> SO <sub>4</sub> |
| SPECIFICATION NUMBER: | 6399                              | RELEASE DATE: | MAY/23/2024                     |
| LOT NUMBER :          | 417203                            |               |                                 |

| TEST                                     | SPECIFICATIONS | LOT VALUES  |
|------------------------------------------|----------------|-------------|
| Assay (Na <sub>2</sub> SO <sub>4</sub> ) | Min. 99.0%     | 99.8 %      |
| pH of a 5% solution at 25°C              | 5.2 - 9.2      | 6.2         |
| Insoluble matter                         | Max. 0.01%     | 0.001 %     |
| Loss on ignition                         | Max. 0.5%      | 0.1 %       |
| Chloride (Cl)                            | Max. 0.001%    | <0.001 %    |
| Nitrogen compounds (as N)                | Max. 5 ppm     | <5 ppm      |
| Phosphate (PO <sub>4</sub> )             | Max. 0.001%    | <0.001 %    |
| Heavy metals (as Pb)                     | Max. 5 ppm     | <5 ppm      |
| Iron (Fe)                                | Max. 0.001%    | <0.001 %    |
| Calcium (Ca)                             | Max. 0.01%     | 0.001 %     |
| Magnesium (Mg)                           | Max. 0.005%    | 0.001 %     |
| Potassium (K)                            | Max. 0.008%    | 0.001 %     |
| Extraction-concentration suitability     | Passes test    | Passes test |
| Appearance                               | Passes test    | Passes test |
| Identification                           | Passes test    | Passes test |
| Solubility and foreign matter            | Passes test    | Passes test |
| Retained on US Standard No. 10 sieve     | Max. 1%        | 0.2 %       |
| Retained on US Standard No. 60 sieve     | Min. 94%       | 96.2 %      |
| Through US Standard No. 60 sieve         | Max. 5%        | 3.5 %       |
| Through US Standard No. 100 sieve        | Max. 10%       | 0.1 %       |

## COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3875

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

## Certificate of Analysis

| Test                                                                    | Specification | Result      |
|-------------------------------------------------------------------------|---------------|-------------|
| Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water) | >= 99.4 %     | 99.8 %      |
| Color (APHA)                                                            | <= 10         | 5           |
| Residue after Evaporation                                               | <= 1.0 ppm    | 0.2 ppm     |
| Substances Reducing Permanganate                                        | Passes Test   | Passes Test |
| Titration Acid (µeq/g)                                                  | <= 0.3        | 0.2         |
| Titration Base (µeq/g)                                                  | <= 0.6        | <0.1        |
| Water (H <sub>2</sub> O)                                                | <= 0.5 %      | 0.2 %       |
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)    | <= 5          | <1          |
| ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)    | <= 10         | 1           |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

E3972

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC



## Certificate of Analysis

### Product information

|                      |                                |
|----------------------|--------------------------------|
| Product              | pH-Fix 0.3-2.3                 |
| REF                  | 92180                          |
| LOT                  | 80A0441                        |
| Expiration date:     | 29.02.2028                     |
| Date of examination: | 23.01.2024                     |
| Gradation:           | pH 0.3-0.7-1.0-1.3-1.6-1.9-2.3 |

### Confirmation

Hereby we confirm, that the above mentioned product has successfully passed our quality control system in accordance with ISO 9001 and meets the specific quality criteria.

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Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis

 **avantor™**



M6151

R → 11/15/25

Material No.: 9530-33  
Batch No.: 22G2862015  
Manufactured Date: 2022-06-15  
Retest Date: 2027-06-14  
Revision No.: 0

## Certificate of Analysis

| Test                                      | Specification | Result      |
|-------------------------------------------|---------------|-------------|
| ACS – Assay (as HCl) (by acid–base titrn) | 36.5 – 38.0 % | 37.9 %      |
| ACS – Color (APHA)                        | ≤ 10          | 5           |
| ACS – Residue after Ignition              | ≤ 3 ppm       | < 1 ppm     |
| ACS – Specific Gravity at 60°/60°F        | 1.185 – 1.192 | 1.191       |
| ACS – Bromide (Br)                        | ≤ 0.005 %     | < 0.005 %   |
| ACS – Extractable Organic Substances      | ≤ 5 ppm       | < 1 ppm     |
| ACS – Free Chlorine (as Cl <sub>2</sub> ) | ≤ 0.5 ppm     | < 0.5 ppm   |
| Phosphate (PO <sub>4</sub> )              | ≤ 0.05 ppm    | < 0.03 ppm  |
| Sulfate (SO <sub>4</sub> )                | ≤ 0.5 ppm     | < 0.3 ppm   |
| Sulfite (SO <sub>3</sub> )                | ≤ 0.8 ppm     | 0.3 ppm     |
| Ammonium (NH <sub>4</sub> )               | ≤ 3 ppm       | < 1 ppm     |
| Trace Impurities – Arsenic (As)           | ≤ 0.010 ppm   | < 0.003 ppm |
| Trace Impurities – Aluminum (Al)          | ≤ 10.0 ppb    | 1.3 ppb     |
| Arsenic and Antimony (as As)              | ≤ 5.0 ppb     | < 3.0 ppb   |
| Trace Impurities – Barium (Ba)            | ≤ 1.0 ppb     | 0.2 ppb     |
| Trace Impurities – Beryllium (Be)         | ≤ 1.0 ppb     | < 0.2 ppb   |
| Trace Impurities – Bismuth (Bi)           | ≤ 10.0 ppb    | < 1.0 ppb   |
| Trace Impurities – Boron (B)              | ≤ 20.0 ppb    | < 5.0 ppb   |
| Trace Impurities – Cadmium (Cd)           | ≤ 1.0 ppb     | < 0.3 ppb   |
| Trace Impurities – Calcium (Ca)           | ≤ 50.0 ppb    | 163.0 ppb   |
| Trace Impurities – Chromium (Cr)          | ≤ 1.0 ppb     | 0.7 ppb     |
| Trace Impurities – Cobalt (Co)            | ≤ 1.0 ppb     | < 0.3 ppb   |
| Trace Impurities – Copper (Cu)            | ≤ 1.0 ppb     | < 0.1 ppb   |
| Trace Impurities – Gallium (Ga)           | ≤ 1.0 ppb     | < 0.2 ppb   |
| Trace Impurities – Germanium (Ge)         | ≤ 3.0 ppb     | < 2.0 ppb   |
| Trace Impurities – Gold (Au)              | ≤ 4.0 ppb     | 0.6 ppb     |
| Heavy Metals (as Pb)                      | ≤ 100 ppb     | < 50 ppb    |
| Trace Impurities – Iron (Fe)              | ≤ 15 ppb      | 6 ppb       |

>>> Continued on page 2 >>>

Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA-ANALYZED® Reagent  
For Trace Metal Analysis

 **avantorsm**



Material No.: 9530-33  
Batch No.: 22G2862015

| Test                                                   | Specification | Result     |
|--------------------------------------------------------|---------------|------------|
| Trace Impurities – Lead (Pb)                           | ≤ 1.0 ppb     | < 0.5 ppb  |
| Trace Impurities – Lithium (Li)                        | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Magnesium (Mg)                      | ≤ 10.0 ppb    | 2.9 ppb    |
| Trace Impurities – Manganese (Mn)                      | ≤ 1.0 ppb     | < 0.4 ppb  |
| Trace Impurities – Mercury (Hg)                        | ≤ 0.5 ppb     | 0.1 ppb    |
| Trace Impurities – Molybdenum (Mo)                     | ≤ 10.0 ppb    | < 3.0 ppb  |
| Trace Impurities – Nickel (Ni)                         | ≤ 4.0 ppb     | < 0.3 ppb  |
| Trace Impurities – Niobium (Nb)                        | ≤ 1.0 ppb     | 0.8 ppb    |
| Trace Impurities – Potassium (K)                       | ≤ 9.0 ppb     | < 2.0 ppb  |
| Trace Impurities – Selenium (Se), For Information Only |               | < 1.0 ppb  |
| Trace Impurities – Silicon (Si)                        | ≤ 100.0 ppb   | < 10.0 ppb |
| Trace Impurities – Silver (Ag)                         | ≤ 1.0 ppb     | 0.5 ppb    |
| Trace Impurities – Sodium (Na)                         | ≤ 100.0 ppb   | 2.3 ppb    |
| Trace Impurities – Strontium (Sr)                      | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Tantalum (Ta)                       | ≤ 1.0 ppb     | 1.6 ppb    |
| Trace Impurities – Thallium (Tl)                       | ≤ 5.0 ppb     | < 2.0 ppb  |
| Trace Impurities – Tin (Sn)                            | ≤ 5.0 ppb     | 4.0 ppb    |
| Trace Impurities – Titanium (Ti)                       | ≤ 1.0 ppb     | 1.5 ppb    |
| Trace Impurities – Vanadium (V)                        | ≤ 1.0 ppb     | < 0.2 ppb  |
| Trace Impurities – Zinc (Zn)                           | ≤ 5.0 ppb     | 0.8 ppb    |
| Trace Impurities – Zirconium (Zr)                      | ≤ 1.0 ppb     | 0.3 ppb    |

>>> Continued on page 3 >>>

Hydrochloric Acid, 36.5–38.0%  
BAKER INSTRA–ANALYZED® Reagent  
For Trace Metal Analysis



Material No.: 9530-33  
Batch No.: 22G2862015

| Test | Specification | Result |
|------|---------------|--------|
|------|---------------|--------|

For Laboratory, Research, or Manufacturing Use  
Product Information (not specifications):  
Appearance (clear, fuming liquid)  
Meets ACS Specifications  
Storage Condition: Store below 25 °C.

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

A handwritten signature in cursive script that reads 'Jamie Ethier'.  
Jamie Ethier  
Vice President Global Quality

# Certificate of analysis

W3082 Received on 2/26/2026 by IZ

Product No.: A12244  
Product: Stearic acid, 98%  
Lot No.: U23E020

Appearance White flakes  
Assay 98.7 %

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**ThermoFisher**  
S C I E N T I F I C



|                      |                                |
|----------------------|--------------------------------|
| 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<br/>VWR Chemicals, LLC.<br/>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> |

# Certificate Of Analysis



Date of Release: 4/8/2025

Name: **Potassium Hydrogen Phthalate**

ACS

Item No: **PX1476 All Sizes**

Lot / Batch No: **2025040493**

Country of Origin: **USA**

| Item                           | Specifications | Analysis    |
|--------------------------------|----------------|-------------|
| Assay (Dried Basis)            | 99.95-100.05%  | 99.98%      |
| Chlorine compounds (as Cl)     | 0.003% max.    | <0.003%     |
| Color                          | White          | Passes Test |
| Form                           | Crystals       | Passes Test |
| Heavy metals (by ICP-OES)      | 5 ppm max.     | <5 ppm      |
| Insoluble Matter               | 0.005% max.    | <0.005%     |
| Iron (Fe)                      | 5 ppm max.     | <5 ppm      |
| pH of a 0.05m solution @ 25.0C | 4.00-4.02      | 4.00        |
| Sodium (Na)                    | 0.005% max.    | <0.005%     |
| Sulfur compounds (as S)        | 0.002% max.    | <0.002%     |

Joe Schoellkopf

-----  
Quality Control Manager

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EMD Millipore is a division of Merck KGaA, Darmstadt, Germany

EMD Millipore Corporation

400 Summit Drive  
Burlington, MA 01803  
U.S.A.

Form number: 00005624CA, Rev. 2.0

W 3228

W 3229

W 3230

Rec. on 7/11/25 by 12



environmental  
express®

2345A Charleston Regional  
Charleston, South Carolina 29492  
environmentalexpress.com  
+1 843.881.6560

May 12, 2025

#### CERTIFICATE OF ANALYSIS

Environmental Express certifies that the following COD Reagent Vials have been rigorously checked against NIST Traceable standards and also compared for conformance to another major brand name product. Environmental Express COD Vial performance is evaluated using bench top spectrophotometers. Acceptance guidelines are strict and ensure dependable, quality results.

Environmental Express further certifies that the COD products listed below are recognized by the United States Environmental Protection Agency (USEPA) as equivalent to an approved Water Pollutant Testing Procedure for COD (Federal Register, Vol. 45, No. 78, Monday, April 20<sup>th</sup>, 1980, page 26811) and as such can be used for National Pollution Discharge Elimination System (NPDES) reporting.

| <u>Cat. No.</u> | <u>Lot No.</u> | <u>Product Description</u>        | <u>Expiration Date</u> |
|-----------------|----------------|-----------------------------------|------------------------|
| B1010           | 5GE0517        | COD Reagent Vials,<br>0 - 150 ppm | May-30                 |

n-Hexane 95%  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis

 **avantors<sup>™</sup>**



W3240  
JP  
Op4tel. 07/15/2025

Material No.: 9262-03  
Batch No.: 25C0362006  
Manufactured Date: 2025-01-29  
Expiration Date: 2026-04-30  
Revision No.: 0

## Certificate of Analysis

| Test                                                                           | Specification  | Result      |
|--------------------------------------------------------------------------------|----------------|-------------|
| FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)           | $\leq 5$       | 1           |
| ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)            | $\leq 10$      | 6           |
| ECD-Sensitive Impurities (as EthyleneDibromide) - Single Impurity Peak (ng/mL) | $\leq 5$       | 4           |
| Assay (Total Saturated C <sub>6</sub> Isomers) (by GC, corrected for water)    | $\geq 99.5 \%$ | 100.0 %     |
| Assay (as n-Hexane) (by GC, corrected for water)                               | $\geq 95 \%$   | 100 %       |
| Color (APHA)                                                                   | $\leq 10$      | 10          |
| Residue after Evaporation                                                      | $\leq 1.0$ ppm | 0.2 ppm     |
| Substances Darkened by H <sub>2</sub> SO <sub>4</sub>                          | Passes Test    | Passes Test |
| Water (by KF, coulometric)                                                     | $\leq 0.05 \%$ | $< 0.01 \%$ |

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials LLC