Alliance TECHNICAL GROUP

284 Sheffield Street, Mountainside NJ 07092
Tel. 908-789-8900 Fax: 908-789-8922

# DATA REPORTING QUALIFIERS- INORGANIC

For reporting results, the following " Results Qualifiers" are used:

| | |
|---|---|
| **J** | Indicates the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL), but greater than or equal to the Instrument Detection Limit (IDL). |
| **U** | Indicates the analyte was analyzed for, but not detected. |
| **ND** | Indicates the analyte was analyzed for, but not detected |
| **E** | Indicates the reported value is estimated because of the presence of interference |
| **M** | Indicates Duplicate injection precision not met. |
| **N** | Indicates the spiked sample recovery is not within control limits. |
| **S** | Indicates the reported value was determined by the Method of Standard Addition (MSA). |
| * | Indicates that the duplicate analysis is not within control limits. |
| + | Indicates the correlation coefficient for the MSA is less than 0.995. |
| **D** | Indicates the reported value is from a secondary analysis with a dilution factor. The original analysis exceeded the calibration range. |
| **M** | Method qualifiers<br>**"P"** for ICP instrument<br>**"PM"** for ICP when Microwave Digestion is used<br>**"CV"** for Manual Cold Vapor AA<br>**"AV"** for automated Cold Vapor AA<br>**"CA"** for MIDI-Distillation Spectrophotometric<br>**"AS"** for Semi –Automated Spectrophotometric<br>**"C"** for Manual Spectrophotometric<br>**"T"** for Titrimetric<br>**"NR"** for analyte not required to be analyzed |
| **OR** | Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis. |
| **Q** | Indicates the LCS did not meet the control limits requirements |
| H | Sample Analysis Out Of Hold Time |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# LAB CHRONICLE

| | | | |
|---|---|---|---|
| **OrderID:** | Q1152 | **OrderDate:** | 1/22/2025 12:51:00 PM |
| **Client:** | Tanagro Corp. | **Project:** | Semi-Annual 2025 |
| **Contact:** | Marcelo Pittari | **Location:** | N11,N31 |

| LabID | ClientID | Matrix | Test | Method | Sample Date | Prep Date | Anal Date | Received |
|---|---|---|---|---|---|---|---|---|
| **Q1152-02** | **EFF-DAY-1-1-4CN** | **WATER** | | | **01/29/25 11:36** | | | **01/29/25** |
| | | | Cyanide | SM4500-CN C,E | | 01/29/25 | 01/30/25 14:27 | |
| | | | Cyanide-Amenable | SM4500-CN B,G Cyanide-Amenable | | | 01/30/25 00:00 | |


# SAMPLE DATA

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Report of Analysis

| | | | |
|---|---|---|---|
| Client: | Tanagro Corp. | Date Collected: | 01/29/25 11:36 |
| Project: | Semi-Annual 2025 | Date Received: | 01/29/25 |
| Client Sample ID: | EFF-DAY-1-1-4CN | SDG No.: | Q1152 |
| Lab Sample ID: | Q1152-02 | Matrix: | WATER |
| | | % Solid: | 0 |

| Parameter | Conc. | Qua. | DF | MDL | LOQ / CRQL | Units | Prep Date | Date Ana. | Ana Met. |
|---|---|---|---|---|---|---|---|---|---|
| Cyanide | 0.0019 | J | 1 | 0.00093 | 0.0050 | mg/L | 01/29/25 14:00 | 01/30/25 14:27 | SM 4500-CN C-16 plus E-16 |
| Cyanide-Amenable | 0.00093 | U | 1 | 0.00093 | 0.0050 | mg/L | | 01/30/25 00:00 | SM 4500-CN B-16 plus G-16 |

Comments:

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
D = Dilution
Q = indicates LCS control criteria did not meet requirements
H = Sample Analysis Out Of Hold Time

J = Estimated Value
B = Analyte Found in Associated Method Blank
* = indicates the duplicate analysis is not within control limits.
E = Indicates the reported value is estimated because of the presence of interference.
OR = Over Range
N =Spiked sample recovery not within control limits

# QC RESULT SUMMARY

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Initial and Continuing Calibration Verification

**Client:** Tanagro Corp. **SDG No.:** Q1152

**Project:** Semi-Annual 2025 **RunNo.:** LB134490

| Analyte | | Units | Result | True Value | % Recovery | Acceptance Window (%R) | Analysis Date |
|---|---|---|---|---|---|---|---|
| Sample ID: | ICV1 | | | | | | |
| Cyanide | | mg/L | 0.096 | 0.099 | 97 | 85-115 | 01/30/2025 |
| Sample ID: | CCV1 | | | | | | |
| Cyanide | | mg/L | 0.24 | 0.25 | 96 | 90-110 | 01/30/2025 |
| Sample ID: | CCV2 | | | | | | |
| Cyanide | | mg/L | 0.24 | 0.25 | 96 | 90-110 | 01/30/2025 |
| Sample ID: | CCV3 | | | | | | |
| Cyanide | | mg/L | 0.25 | 0.25 | 100 | 90-110 | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Initial and Continuing Calibration Blank Summary

**Client:** Tanagro Corp. **SDG No.:** Q1152

**Project:** Semi-Annual 2025 **RunNo.:** LB134490

| Analyte | | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| Sample ID: | ICB1 | | | | | | | |
| Cyanide | | mg/L | < 0.0025 | 0.0025 | U | 0.00093 | 0.005 | 01/30/2025 |
| Sample ID: | CCB1 | | | | | | | |
| Cyanide | | mg/L | < 0.0025 | 0.0025 | U | 0.00093 | 0.005 | 01/30/2025 |
| Sample ID: | CCB2 | | | | | | | |
| Cyanide | | mg/L | < 0.0025 | 0.0025 | U | 0.00093 | 0.005 | 01/30/2025 |
| Sample ID: | CCB3 | | | | | | | |
| Cyanide | | mg/L | < 0.0025 | 0.0025 | U | 0.00093 | 0.005 | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Preparation Blank Summary

**Client:** Tanagro Corp. **SDG No.:** Q1152

**Project:** Semi-Annual 2025

| Analyte | Units | Result | Acceptance Limits | Conc Qual | MDL | RDL | Analysis Date |
|---|---|---|---|---|---|---|---|
| **Sample ID:** PB166383BL | | | | | | | |
| Cyanide | mg/L | < 0.0025 | 0.0025 | U | 0.00093 | 0.005 | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Matrix Spike Summary

**Client:** Tanagro Corp.
**Project:** Semi-Annual 2025
**Client ID:** EFF-DAY-1-1-4CNMS

**SDG No.:** Q1152
**Sample ID:** Q1152-02
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | mg/L | 75-125 | 0.037 | | 0.0019 | J | 0.04 | 1 | 88 | | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Matrix Spike Summary

**Client:** Tanagro Corp.
**SDG No.:** Q1152
**Project:** Semi-Annual 2025
**Sample ID:** Q1152-02
**Client ID:** EFF-DAY-1-1-4CNMSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit %R | Spiked Result | Conc. Qualifier | Sample Result | Conc. Qualifier | Spike Added | Dilution Factor | % Rec | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | mg/L | 75-125 | 0.037 | | 0.0019 | J | 0.04 | 1 | 88 | | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Duplicate Sample Summary

**Client:** Tanagro Corp.
**SDG No.:** Q1152
**Project:** Semi-Annual 2025
**Sample ID:** Q1152-02
**Client ID:** EFF-DAY-1-1-4CNDUP
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | mg/L | +/-20 | 0.0019 | J | 0.0019 | J | 1 | 0 | | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Duplicate Sample Summary

**Client:** Tanagro Corp.
**SDG No.:** Q1152
**Project:** Semi-Annual 2025
**Sample ID:** Q1152-02
**Client ID:** EFF-DAY-1-1-4CNMSD
**Percent Solids for Spike Sample:** 0

| Analyte | Units | Acceptance Limit | Sample Result | Conc. Qualifier | Duplicate Result | Conc. Qualifier | Dilution Factor | RPD/ AD | Qual | Analysis Date |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | mg/L | +/-20 | 0.037 | | 0.037 | | 1 | 0 | | 01/30/2025 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Laboratory Control Sample Summary

**Client:** Tanagro Corp. **SDG No.:** Q1152

**Project:** Semi-Annual 2025 **Run No.:** LB134490

| Analyte | Units | True Value | Result | Conc. Qualifier | % Recovery | Dilution Factor | Acceptance Limit %R | Analysis Date |
|---|---|---|---|---|---|---|---|---|
| **Sample ID** **PB166383BS** | | | | | | | | |
| Cyanide | mg/L | 0.1 | 0.099 | | 99 | 1 | 85-115 | 01/30/2025 |

Alliance
TECHNICAL GROUP

# RAW DATA

LB

Test results — Aquakem 7.2AQ1 — 

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF — Instrument ID : Konelab

1/30/2025 15:29

Test: Total CN

| Sample Id | Result | Dil. | 1 + | Response | Errors |
|---|---|---|---|---|---|
| ICV1 | 96.209 | 0.0 | | 0.072 | |
| ICB1 | -0.117 | 0.0 | | 0.002 | |
| CCV1 | 241.779 | 0.0 | | 0.178 | |
| CCB1 | 0.078 | 0.0 | | 0.002 | |
| RL CHECK | 4.466 | 0.0 | | 0.005 | 89 % (50 -150) NF 01.30.2025 |
| PB166383BL | -0.281 | 0.0 | | 0.002 | |
| PB166383BS | 99.104 | 0.0 | | 0.074 | 97 % (90- 110) |
| MIDPB166383 | 243.099 | 0.0 | | 0.179 | |
| Q1168-10 | 2.474 | 0.0 | | 0.004 | |
| Q1168-10RE | 3.955 | 0.0 | | 0.005 | |
| Q1168-11 | 4.737 | 0.0 | | 0.005 | |
| Q1152-02 | 1.866 | 0.0 | | 0.003 | |
| Q1152-02DUP | 1.948 | 0.0 | | 0.003 | |
| CCV2 | 244.726 | 0.0 | | 0.180 | |
| CCB2 | 0.251 | 0.0 | | 0.002 | |
| Q1152-02MS | 36.739 | 0.0 | | 0.029 | |
| Q1152-02MSD | 37.464 | 0.0 | | 0.029 | |
| CCV3 | 252.167 | 0.0 | | 0.186 | |
| CCB3 | 0.212 | 0.0 | | 0.002 | |

| | |
|---|---|
| N | 19 |
| Mean | 66.888 |
| SD | 99.4232 |
| CV% | 148.64 |

Aquakem v. 7.2AQ1
Results from time period:
Thu Jan 30 14:12:40 2025
Thu Jan 30 15:26:07 2025

| Sample Id | Sam/Ctr/cA | Test short r | Test type | Result | Result unit | Result date and time | Stat |
|---|---|---|---|---|---|---|---|
| 0.0PPBCN | A | Total CN | P | -0.5528 | µg/l | 1/30/2025 10:07:36 | |
| 5.0PPBCN | A | Total CN | P | 4.2646 | µg/l | 1/30/2025 10:07:37 | |
| 10PPBCN | A | Total CN | P | 9.1795 | µg/l | 1/30/2025 10:07:38 | |
| 50PPBCN | A | Total CN | P | 50.4325 | µg/l | 1/30/2025 10:07:39 | |
| 100PPBCN | A | Total CN | P | 101.9819 | µg/l | 1/30/2025 10:07:40 | |
| 250PPBCN | A | Total CN | P | 250.2204 | µg/l | 1/30/2025 10:07:41 | |
| 500PPBCN | A | Total CN | P | 499.474 | µg/l | 1/30/2025 10:07:42 | |
| ICV1 | S | Total CN | P | 96.209 | µg/l | 1/30/2025 14:12:41 | |
| ICB1 | S | Total CN | P | -0.1172 | µg/l | 1/30/2025 14:12:43 | |
| CCV1 | S | Total CN | P | 241.7788 | µg/l | 1/30/2025 14:12:44 | |
| CCB1 | S | Total CN | P | 0.0784 | µg/l | 1/30/2025 14:12:46 | |
| RL CHECK | S | Total CN | P | 4.4655 | µg/l | 1/30/2025 14:12:49 | |
| PB166383BL | S | Total CN | P | -0.2814 | µg/l | 1/30/2025 14:20:12 | |
| PB166383BS | S | Total CN | P | 99.1045 | µg/l | 1/30/2025 14:20:13 | |
| MIDPB166383 | S | Total CN | P | 243.099 | µg/l | 1/30/2025 14:20:16 | |
| Q1168-10 | S | Total CN | P | 2.4739 | µg/l | 1/30/2025 14:20:18 | |
| Q1168-10RE | S | Total CN | P | 3.9551 | µg/l | 1/30/2025 14:20:20 | |
| Q1168-11 | S | Total CN | P | 4.737 | µg/l | 1/30/2025 14:20:21 | |
| Q1152-02 | S | Total CN | P | 1.8665 | µg/l | 1/30/2025 14:27:47 | |
| Q1152-02DUP | S | Total CN | P | 1.948 | µg/l | 1/30/2025 14:27:50 | |
| CCV2 | S | Total CN | P | 244.7261 | µg/l | 1/30/2025 14:27:54 | |
| CCB2 | S | Total CN | P | 0.2506 | µg/l | 1/30/2025 14:27:55 | |
| Q1152-02MS | S | Total CN | P | 36.7387 | µg/l | 1/30/2025 15:26:01 | |
| Q1152-02MSD | S | Total CN | P | 37.4645 | µg/l | 1/30/2025 15:26:03 | |
| CCV3 | S | Total CN | P | 252.1675 | µg/l | 1/30/2025 15:26:04 | |
| CCB3 | S | Total CN | P | 0.2119 | µg/l | 1/30/2025 15:26:06 | |

Calibration results  Aquakem 7.2AQ1  

CHEMTECH CONSULTING GROUP INC
284 Sheffield Street, Mountainside, NJ 07092

Reviewed by : NF  Instrument ID : Konelab

1/30/2025 10:08

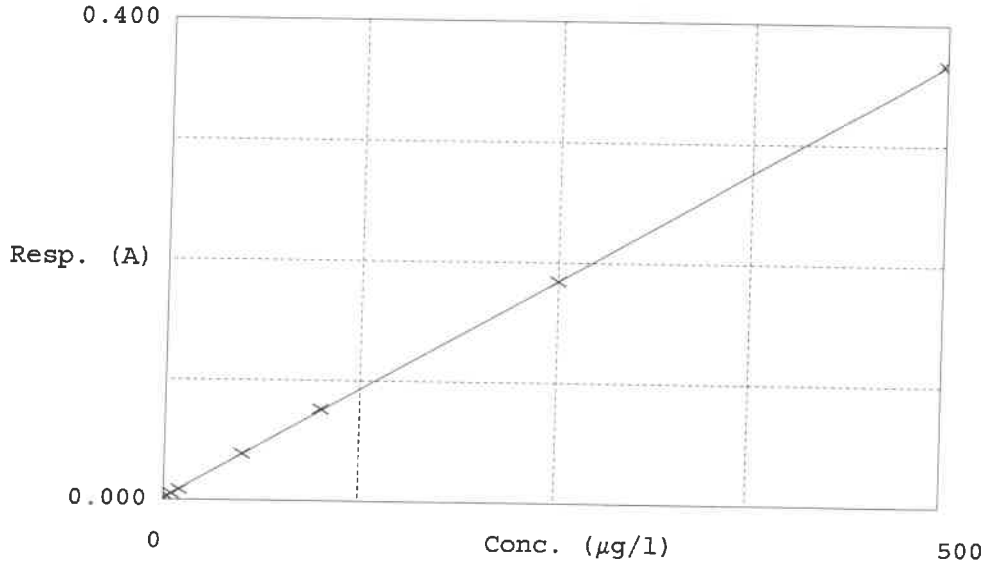
Test Total CN

Accepted 1/30/2025 10:08

Factor 1371
Bias 0.002

Coeff. of det. 0.999971

Errors




| | Calibrator | Response | Calc. con. | Conc. | Errors (Re) |
|---|---|---|---|---|---|
| 1 | 0.0PPBCN | 0.002 | -0.5528 | 0.0000 | |
| 2 | 5.0PPBCN | 0.005 | 4.2646 | 5.0000 | -14.7 |
| 3 | 10PPBCN | 0.009 | 9.1795 | 10.0000 | -8.2 |
| 4 | 50PPBCN | 0.039 | 50.4325 | 50.0000 | 0.9 |
| 5 | 100PPBCN | 0.076 | 101.9819 | 100.0000 | 2.0 |
| 6 | 250PPBCN | 0.184 | 250.2204 | 250.0000 | 0.1 |
| 7 | 500PPBCN | 0.366 | 499.4740 | 500.0000 | -0.1 |

NF
01.30.2025

Alliance TECHNICAL GROUP

**Water Cyanide Preparation Sheet**

PB166383

**SOP ID :** MSM4500-CN C,E-Cyanide-12

**SDG No :** N/A

**Start Digest Date:** 01/29/2025 **Time :** 14:00 **Temp :** 123 °C

**Matrix :** WATER

**End Digest Date:** 01/29/2025 **Time :** 15:30 **Temp :** 126 °C

**Pippete ID :** WC

**Balance ID :** N/A

**Hood ID :** HOOD#1 **Digestion tube ID :** M5595 **Block Thermometer ID :** WC CYANIDE

**Block ID :** MC-1,MC-2 **Filter paper ID :** N/A **Prep Technician Signature:** TB

**Weigh By :** N/A **pH Meter ID :** N/A **Supervisor Signature:** 12

| Standared Name | MLS USED | STD REF. # FROM LOG |
|---|---|---|
| LCSW | 1.0ML | WP111296 |
| MS/MSD SPIKE SOL. | 0.4ML | WP111295 |
| PBW | 50.0ML | W3112 |
| RL CHECK | 50.0ML | WP1111695 |
| LOD | 1.25ML | WP111695 |

| Chemical Used | ML/SAMPLE USED | Lot Number |
|---|---|---|
| 0.25N NaOH | 50.0ML | WP111294 |
| 50% v/v H2SO4 | 5.0ML | WP110391 |
| 51% w/v MgCL2 | 2.0ML | WP110390 |
| pH Paper 0-14 | N/A | W3140 |
| Nitrate/Nitrite Strip | N/A | W3101 |
| Lead Acetate strip | N/A | W3134 |
| KI-starch paper | N/A | W3155 |
| N/A | N/A | N/A |
| N/A | N/A | N/A |
| N/A | N/A | N/A |

| LAB SAMPLE ID | CLIENT SAMPLE ID | Wt(g)/Vol(ml) | Comment |
|---|---|---|---|
| S0 | S0 | N/A | N/A |
| S5.0 | S5.0 | N/A | N/A |
| S10.0 | S10.0 | N/A | N/A |
| S100.0 | S100.0 | N/A | N/A |
| S250.0 | S250.0 | N/A | N/A |
| S500.0 | S500.0 | N/A | N/A |
| ICV | ICV | 0.5ML | W3012 |
| ICB | ICB | N/A | N/A |
| CCV | CCV | N/A | N/A |
| CCB | CCB | N/A | N/A |
| Midrange | Midrange | 2.5ML | WP111295 |
| HIGHSTD | HIGHSTD | N/A | N/A |
| LOWSTD | LOWSTD | N/A | N/A |

**Extraction Conformance/Non-Conformance Comments:**

LOD WP111695 2.00ML,LOQ WP111695 2.5ML

| Date / Time | Prepped Sample Relinquished By/Location | Received By/Location |
|---|---|---|
| 01.29.2025, 15:40 | TB Cool C | NF(WC) |
| | Preparation Group | Analysis Group |

Alliance TECHNICAL GROUP

## Water Cyanide Preparation Sheet

**PB166383**

| Lab Sample ID | Client Sample ID | Initial Vol (ml) | Final Vol (ml) | pH | Sulfide | Oxidizing | Nitrate/ Nitrite | Comment | Prep Pos |
|---|---|---|---|---|---|---|---|---|---|
| PB166383BL | PBW383 | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| PB166383BS | LCS383 | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1152-02DUP | EFF-DAY-1-1-4CNDUP | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1152-02MS | EFF-DAY-1-1-4CNMS | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1152-02MSD | EFF-DAY-1-1-4CNMSD | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1152-02 | EFF-DAY-1-1-4CN | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1168-10 | LOD-MDL-WATER-04-QT1-2025 | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |
| Q1168-11 | LOQ-WATER-05-QT1-2025 | 50 | 50 | >12 | Negative | Negative | Negative | N/A | N/A |

# WORKLIST(Hardcopy Internal Chain)

**WorkList Name :** CN Q1152 **WorkList ID :** 187266 **Department :** Distillation **Date :** 01-29-2025 13:29:59

| Sample | Customer Sample | Matrix | Test | Preservative | Customer | Raw Sample Storage Location | Collect Date | Method |
|---|---|---|---|---|---|---|---|---|
| Q1152-02 | EFF-DAY-1-1-4CN | Water | Cyanide | 1:1 NaOH to pH >12 | TANA01 | N31 | 01/29/2025 | SM4500-CN C |
| Q1168-10 | LOD-MDL-WATER-04-QT1-202 | Water | Cyanide | 10 N NaOH to pH >12 | CHEM02 | QA Of | 01/23/2025 | SM4500-CN C |
| Q1168-11 | LOQ-WATER-05-QT1-2025 | Water | Cyanide | 10 N NaOH to pH >12 | CHEM02 | QA Of | 01/23/2025 | SM4500-CN C |

**Date/Time** 01.29.2025, 13:32
**Raw Sample Received by:** ~~TA~~ TA (WOC)
**Raw Sample Relinquished by:** [signature]



**Date/Time** 01.29.2025, 15:40
**Raw Sample Received by:** [signature]
**Raw Sample Relinquished by:** TA (WOC)

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB134490

| | | | |
|---|---|---|---|
| Review By | Niha | Review On | 1/31/2025 9:43:02 AM |
| Supervise By | Iwona | Supervise On | 1/31/2025 11:13:29 AM |
| SubDirectory | LB134490 | Test | Cyanide |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP111709,WP111710,WP111711,WP111712,WP111713,WP111714,WP111715 |
| ICV Standard | W3012 |
| CCV Standard | WP111709 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP111296 |
| Chk Standard | WP111035,WP110103,WP111717,WP111695 |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| 1 | 0.0PPBCN | 0.0PPBCN | CAL1 | 01/30/25 10:07 | | Niha | OK |
| 2 | 5.0PPBCN | 5.0PPBCN | CAL2 | 01/30/25 10:07 | | Niha | OK |
| 3 | 10PPBCN | 10PPBCN | CAL3 | 01/30/25 10:07 | | Niha | OK |
| 4 | 50PPBCN | 50PPBCN | CAL4 | 01/30/25 10:07 | | Niha | OK |
| 5 | 100PPBCN | 100PPBCN | CAL5 | 01/30/25 10:07 | | Niha | OK |
| 6 | 250PPBCN | 250PPBCN | CAL6 | 01/30/25 10:07 | | Niha | OK |
| 7 | 500PPBCN | 500PPBCN | CAL7 | 01/30/25 10:07 | | Niha | OK |
| 8 | ICV1 | ICV1 | ICV | 01/30/25 14:12 | | Niha | OK |
| 9 | ICB1 | ICB1 | ICB | 01/30/25 14:12 | | Niha | OK |
| 10 | CCV1 | CCV1 | CCV | 01/30/25 14:12 | | Niha | OK |
| 11 | CCB1 | CCB1 | CCB | 01/30/25 14:12 | | Niha | OK |
| 12 | RL | RL | SAM | 01/30/25 14:12 | | Niha | OK |
| 13 | PB166383BL | PB166383BL | MB | 01/30/25 14:20 | | Niha | OK |
| 14 | PB166383BS | PB166383BS | LCS | 01/30/25 14:20 | | Niha | OK |
| 15 | MIDPB166383 | MIDPB166383 | SAM | 01/30/25 14:20 | | Niha | OK |
| 16 | Q1168-10 | LOD-MDL-WATER-04 | SAM | 01/30/25 14:20 | | Niha | OK |
| 17 | Q1168-10RE | LOD-MDL-WATER-04 | SAM | 01/30/25 14:20 | | Niha | OK |
| 18 | Q1168-11 | LOQ-WATER-05-QT1 | LOQ | 01/30/25 14:20 | | Niha | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:** KONELAB

## Daily Analysis Runlog For Sequence/QCBatch ID # LB134490

| | | | |
|---|---|---|---|
| Review By | Niha | Review On | 1/31/2025 9:43:02 AM |
| Supervise By | Iwona | Supervise On | 1/31/2025 11:13:29 AM |
| SubDirectory | LB134490 | Test | Cyanide |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | WP111709,WP111710,WP111711,WP111712,WP111713,WP111714,WP111715 |
| ICV Standard | W3012 |
| CCV Standard | WP111709 |
| ICSA Standard | N/A |
| CRI Standard | N/A |
| LCS Standard | WP111296 |
| Chk Standard | WP111035,WP110103,WP111717,WP111695 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 19 | Q1152-02 | EFF-DAY-1-1-4CN | SAM | 01/30/25 14:27 | | Niha | OK |
| 20 | Q1152-02DUP | EFF-DAY-1-1-4CNDU | DUP | 01/30/25 14:27 | | Niha | OK |
| 21 | CCV2 | CCV2 | CCV | 01/30/25 14:27 | | Niha | OK |
| 22 | CCB2 | CCB2 | CCB | 01/30/25 14:27 | | Niha | OK |
| 23 | Q1152-02MS | EFF-DAY-1-1-4CNMS | MS | 01/30/25 15:26 | | Niha | OK |
| 24 | Q1152-02MSD | EFF-DAY-1-1-4CNMS | MSD | 01/30/25 15:26 | | Niha | OK |
| 25 | CCV3 | CCV3 | CCV | 01/30/25 15:26 | | Niha | OK |
| 26 | CCB3 | CCB3 | CCB | 01/30/25 15:26 | | Niha | OK |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

**Instrument ID:**

## Daily Analysis Runlog For Sequence/QCBatch ID #

| | |
|---|---|
| Review By | Review On |
| Supervise By | Supervise On |

| STD. NAME | STD REF.# |
|---|---|
| ICAL Standard | |
| ICV Standard | |
| CCV Standard | |
| ICSA Standard | |
| CRI Standard | |
| LCS Standard | |
| Chk Standard | |

| Sr# | SampleId | ClientID | QcType | Date | Comment | Operator | Status |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900, Fax : 908 789 8922

# Prep Standard - Chemical Standard Summary

**Order ID :** Q1152

**Test :** Cyanide,Cyanide-Amenable

**Prepbatch ID :** PB166383,

**Sequence ID/Qc Batch ID:** LB134490,LB134506,

**Standard ID :**
WP110103,WP110390,WP110391,WP111035,WP1111695,WP111294,WP111295,WP111296,WP111695,WP111707,WP111709,WP111710,WP111711,WP111712,WP111713,WP111714,WP111715,WP111717,

**Chemical ID :**
M5673,M6121,W2668,W2882,W3001,W3012,W3019,W3101,W3112,W3113,W3138,W3139,W3140,W3154,

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 539 | CN BUFFER | WP110103 | 10/08/2024 | 04/08/2025 | Rubina Mughal | WETCHEM_SCALE_5 (WCSC-5) | None | Iwona Zarych 10/08/2024 |

**FROM** 138.00000gram of W2668 + 862.00000ml of W3112 = Final Quantity: 1000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3214 | Magnesium Chloride For Cyanide 2.5M(51%W/V) | WP110390 | 10/24/2024 | 04/24/2025 | Niha Farheen Shaik | WETCHEM_SCALE_5 (WCSC-5) | None | Iwona Zarych 10/24/2024 |

**FROM** 500.00000ml of W3112 + 510.00000gram of W3001 = Final Quantity: 1000.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1714 | Sulfuric Acid, 50% (v/v) | WP110391 | 10/24/2024 | 04/24/2025 | Niha Farheen Shaik | None | None | Iwona Zarych 10/24/2024 |

**FROM** 1000.00000ml of M5673 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 607 | PYRIDINE-BARBITURIC ACID | WP111035 | 12/09/2024 | 04/30/2025 | Niha Farheen Shaik | WETCHEM_SCALE_5 (WCSC-5) | Glass Pipette-A | Iwona Zarych 12/10/2024 |

**FROM** 145.00000ml of W3112 + 15.00000gram of W2882 + 15.00000ml of M6121 + 75.00000ml of W3019 = Final Quantity: 250.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 11 | Sodium hydroxide absorbing solution 0.25 N | WP111294 | 01/07/2025 | 07/07/2025 | Niha Farheen Shaik | WETCHEM_SCALE_5 (WCSC-5) | None | Iwona Zarych 01/07/2025 |

**FROM** 21.00000L of W3112 + 210.00000gram of W3113 = Final Quantity: 21.000 L

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3850 | Cyanide MS-MSD spiking solution, 5PPM | WP111295 | 01/07/2025 | 07/07/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/07/2025 |

**FROM** 1.00000ml of W3154 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3371 | Cyanide LCS Spike Solution, 5PPM | WP111296 | 01/07/2025 | 07/07/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/07/2025 |

**FROM** 1.00000ml of W3138 + 199.00000ml of WP111294 = Final Quantity: 200.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1649 | Cyanide LOD LOQ Spike Std, 100ppb | WP111695 | 01/29/2025 | 01/30/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 1.00000ml of WP111296 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3456 | Cyanide Intermediate Working Std, 5PPM | WP111707 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 0.25000ml of W3154 + 49.75000ml of WP111294 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 3761 | Calibration-CCV CN Standard 250 ppb | WP111709 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | Glass Pipette-A | Iwona Zarych 01/31/2025 |

**FROM** 2.50000ml of WP111707 + 47.50000ml of WP111294 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 4 | Calibation standard 500 ppb | WP111710 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | Glass Pipette-A | Iwona Zarych 01/31/2025 |

**FROM** 45.00000ml of WP111294 + 5.00000ml of WP111707 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 6 | Calibration Standard 100 ppb | WP111711 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 1.00000ml of WP111707 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 7 | Calibration Standard 50 ppb | WP111712 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 0.50000ml of WP111707 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 8 | Calibration Standard 10 ppb | WP111713 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 1.00000ml of WP111710 + 49.00000ml of WP111294 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 9 | Calibration Standard 5 ppb | WP111714 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | WETCHEM_PIPETTE_3 (WC) | Iwona Zarych 01/31/2025 |

**FROM** 0.50000ml of WP111710 + 49.50000ml of WP111294 = Final Quantity: 50.000 ml

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 167 | 0 ppb CN calibration std | WP111715 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | None | None | Iwona Zarych 01/31/2025 |

**FROM** 50.00000ml of WP111294 = Final Quantity: 50.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# Wet Chemistry STANDARD PREPARATION LOG

| Recipe ID | NAME | NO. | Prep Date | Expiration Date | Prepared By | ScaleID | PipetteID | Supervised By |
|---|---|---|---|---|---|---|---|---|
| 1582 | Chloramine T solution, 0.014M | WP111717 | 01/30/2025 | 01/31/2025 | Niha Farheen Shaik | WETCHEM_SCALE_5 (WCSC-5) | None | Iwona Zarych 01/31/2025 |

**FROM** 0.08000gram of W3139 + 20.00000ml of W3112 = Final Quantity: 20.000 ml

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| Seidler Chemical | BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L) | 23D2462010 | 03/20/2028 | 09/21/2023 / mohan | 09/05/2023 / mohan | M5673 |

| 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) | 0000275677 | 05/13/2025 | 11/13/2024 / Eman | 10/13/2024 / Eman | M6121 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | J3818-5 / SODIUM PHOSPHATE, MONOBAS/HYD, CRYS, ACS, 2.5 KG | 0000225799 | 12/03/2025 | 04/05/2021 / Alexander | 02/10/2020 / apatel | W2668 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | EM-BX0035-3 / Barbituric Acid, 100 gms | 1.00132.0100 | 04/30/2025 | 12/07/2021 / | 11/30/2021 / apatel | W2882 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 01237-10KG / Megnasium Chloride Hexahydrate ACS 10KG | 002251-03319 | 06/06/2027 | 01/23/2023 / Iwona | 06/06/2022 / Iwona | W3001 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| EPA | / ICV-CN | ICV6-400 | 12/31/2025 | 01/08/2025 / Iwona | 02/20/2020 / Iwona | W3012 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| SIGMA ALDRICH | 270970-1L / Pyridine 1L | SHBQ2113 | 04/03/2028 | 04/03/2023 / Iwona | 04/03/2023 / Iwona | W3019 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 470112-662 / TEST STRIPES, NITRATE/NITRITE, PK50 | 402403 | 04/30/2026 | 05/02/2024 / Iwona | 04/10/2024 / Iwona | W3101 |

| 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 / Iwona | 07/03/2024 / Iwona | W3112 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | PC19510-7 / Sodium Hydroxide Pellets 12 Kg | 23B1556310 | 12/31/2025 | 07/08/2024 / Iwona | 07/08/2024 / Iwona | W3113 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | LC135457 / Cyanide Standard, 1000 PPM, Second Source | 44080060 | 01/30/2025 | 09/06/2024 / Iwona | 08/28/2024 / Iwona | W3138 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | JTE494-6 / CHLORAMINE-T BAKER 250GM | 10239484 | 09/09/2029 | 09/09/2024 / Iwona | 09/09/2024 / Iwona | W3139 |

284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
Fax : 908 789 8922

# CHEMICAL RECEIPT LOG BOOK

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | 140444 / TEST PAPERS,PH 0-14,.5 SENSI,100PK | 10D0142 | 09/17/2029 | 09/17/2024 / Iwona | 09/17/2024 / Iwona | W3140 |

| Supplier | ItemCode / ItemName | Lot # | Expiration Date | Date Opened / Opened By | Received Date / Received By | Chemtech Lot # |
|---|---|---|---|---|---|---|
| PCI Scientific Supply, Inc. | RC2543-4 / CYANIDE STD 1000PPM 4OZ | 1411J58 | 05/31/2025 | 12/02/2024 / Iwona | 12/02/2024 / Iwona | W3154 |

~~W2918~~ W3001 Rec. 06/06/22 exp. 06/06/27

# Chem-Impex International, Inc.


**Tel: (630) 766-2112**
**E-mail: sales@chemimpex.com**
**Shipping and Correspondence:**
935 Dillon Drive
Wood Dale, IL 60191

**Fax: (630) 766-2218**
**Web site: www.chemimpex.com**
**Manufacturing site:**
825 Dillon Drive
Wood Dale, IL 60191


## *Certificate of Analysis*

| | |
|---|---|
| **Catalogue Number** | 01237 |
| **Product** | **Magnesium chloride hexahydrate** |
| **Lot Number** | 002251-03319 |
| | Magnesium chloride•$6H_2O$ |
| **CAS Number** | 7791-18-6 |
| **Molecular Formula** | $MgCl_2$•$6H_2O$ |
| **Molecular Weight** | 203.3 |

| | |
|---|---|
| **Appearance** | Colorless crystals, very deliquescent |
| **Heavy Metals** | < 5 ppm |
| **Anion** | Nitrate : < 0.001%<br>Phosphate : < 5 ppm<br>Sulfate : < 0.002% |
| **Cation** | Ammonium : < 0.002%<br>Barium : < 0.005%<br>Calcium : 0.0006%<br>Iron : < 5 ppm<br>Manganese : 1.8 ppm<br>Potassium : 0.0006%<br>Sodium : 0.0008%<br>Strontium : 0.0015% |
| **Insoluble material** | 0.0025% |
| **Assay by titration** | 100.29% |
| **Grade** | ACS reagent |
| **Storage** | Store at RT |
| **Country of Origin** | India |

# *Certificate of Analysis*

**Catalog Number: 01237** **Lot Number: 002251-03319**

| | |
|---|---|
| **Remarks** | See material safety data sheet for additional information |
| | For laboratory use only |

**The foregoing is a copy of the Certificate of Analysis as provided by our supplier**

**Bala Kumar**
**Quality Control Manager**

Sigma-Aldrich.

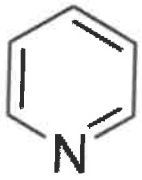
W3019
Rec 4/3/23

3050 Spruce Street, Saint Louis, MO 63103, USA
Website: www.sigmaaldrich.com
Email USA: techserv@sial.com
Outside USA: eurtechserv@sial.com

# Certificate of Analysis

Product Name:
**Pyridine - anhydrous, 99.8%**

| | |
|---|---|
| **Product Number:** | **270970** |
| **Batch Number:** | **SHBQ2113** |
| Brand: | SIAL |
| CAS Number: | 110-86-1 |
| MDL Number: | MFCD00011732 |
| Formula: | C5H5N |
| Formula Weight: | 79.10 g/mol |
| Quality Release Date: | 15 DEC 2022 |




| Test | Specification | Result |
|---|---|---|
| Appearance (Color) | Colorless | Colorless |
| Appearance (Form) | Liquid | Liquid |
| Infrared Spectrum | Conforms to Structure | Conforms |
| Purity (GC) | ≥ 99.75 % | 99.99 % |
| Water (by Karl Fischer) | ≤ 0.003 % | 0.002 % |
| Residue on Evaporation | ≤ 0.0005 % | < 0.0001 % |

Larry Coers, Director
Quality Control
Sheboygan Falls, WI US

W3011
W3012
W3013
W3014
W3015

For ICP-MS use: dilute the ICV1 concentrate 50-fold with 1% (v/v) nitric acid; pipet 2 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 1% (v/v) nitric acid.

**ICV5-0415** For the cold vapor analysis of mercury by AA: dilute the ICV5 concentrate 100-fold with 2% (v/v) nitric acid; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with 2% (v/v) nitric acid. The ICV5 concentrate is prepared in 0.05% (w/v) $K_2Cr_2O_7$ and 5% (v/v) nitric acid.

**ICV6-0400** For the analysis of cyanide: dilute the ICV6 concentrate 100-fold with Type II water; pipet 1 mL of the concentrate into a 100 mL volumetric flask and dilute to volume with Type II water. Distill this solution along with the samples before analysis. The cyanide concentrate is prepared from $K_3Fe(CN)_6$, Type II water, and 0.1 % sodium hydroxide, and will decompose rapidly if exposed to light.

**NOTE:** USE TYPE II WATER AND HIGH-PURITY ACIDS FOR ALL DILUTIONS.

## (D) *CERTIFIED CONCENTRATIONS OF QATS ICV1, ICV5, AND ICV6 SOLUTIONS*

| ICV1-1014 | | |
|---|---|---|
| **Element** | **Concentration (µg/L) (after 10-fold dilution)** | **Concentration (µg/L) (after 50-fold dilution)** |
| **Al** | 2520 | 504 |
| **Sb** | 1010 | 202 |
| **As** | 997 | 199 |
| **Ba** | 518 | 104 |
| **Be** | 514 | 103 |
| **Cd** | 514 | 103 |
| **Ca** | 10000 | 2000 |
| **Cr** | 517 | 103 |
| **Co** | 521 | 104 |
| **Cu** | 505 | 101 |
| **Fe** | 10100 | 2020 |
| **Pb** | 1030 | 206 |
| **Mg** | 5990 | 1198 |
| **Mn** | 524 | 105 |
| **Ni** | 525 | 105 |
| **K** | 9940 | 1988 |
| **Se** | 1030 | 206 |
| **Ag** | 252 | 50 |
| **Na** | 10100 | 2020 |
| **Tl** | 1040 | 208 |
| **V** | 504 | 101 |
| **Zn** | 1010 | 202 |

| ICV5-0415 | | ICV6-0400 | |
|---|---|---|---|
| **Element** | **Concentration (µg/L) (after 100-fold dilution)** | **Analyte** | **Concentration (µg/L) (after 100-fold dilution)** |
| **Hg** | 4.0 | **$CN^-$** | 99 |

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010
Manufactured Date: 2023-03-22
Retest Date: 2028-03-20
Revision No.: 0

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS – Assay ($H_2SO_4$) | 95.0 – 98.0 % | 96.1 % |
| Appearance | Passes Test | Passes Test |
| ACS – Color (APHA) | ≤ 10 | 5 |
| ACS – Residue after Ignition | ≤ 3 ppm | < 1 ppm |
| ACS – Substances Reducing Permanganate (as SO2) | ≤ 2 ppm | < 2 ppm |
| Ammonium ($NH_4$) | ≤ 1 ppm | 1 ppm |
| Chloride (Cl) | ≤ 0.1 ppm | < 0.1 ppm |
| Nitrate ($NO_3$) | ≤ 0.2 ppm | < 0.1 ppm |
| Phosphate ($PO_4$) | ≤ 0.5 ppm | < 0.1 ppm |
| Trace Impurities – Aluminum (Al) | ≤ 30.0 ppb | < 5.0 ppb |
| Arsenic and Antimony (as As) | ≤ 4.0 ppb | < 2.0 ppb |
| Trace Impurities – Boron (B) | ≤ 10.0 ppb | 8.5 ppb |
| Trace Impurities – Cadmium (Cd) | ≤ 2.0 ppb | < 0.3 ppb |
| Trace Impurities – Chromium (Cr) | ≤ 6.0 ppb | < 0.4 ppb |
| Trace Impurities – Cobalt (Co) | ≤ 0.5 ppb | < 0.3 ppb |
| Trace Impurities – Copper (Cu) | ≤ 1.0 ppb | < 0.1 ppb |
| Trace Impurities – Gold (Au) | ≤ 10.0 ppb | 0.5 ppb |
| Heavy Metals (as Pb) | ≤ 500.0 ppb | < 100.0 ppb |
| Trace Impurities – Iron (Fe) | ≤ 50.0 ppb | 1.3 ppb |
| Trace Impurities – Lead (Pb) | ≤ 0.5 ppb | < 0.5 ppb |
| Trace Impurities – Magnesium (Mg) | ≤ 7.0 ppb | 0.8 ppb |
| Trace Impurities – Manganese (Mn) | ≤ 1.0 ppb | < 0.4 ppb |
| Trace Impurities – Mercury (Hg) | ≤ 0.5 ppb | < 0.1 ppb |
| Trace Impurities – Nickel (Ni) | ≤ 2.0 ppb | 0.3 ppb |
| Trace Impurities – Potassium (K) | ≤ 500.0 ppb | < 2.0 ppb |
| Trace Impurities – Selenium (Se) | ≤ 50.0 ppb | < 0.1 ppb |
| Trace Impurities – Silicon (Si) | ≤ 100.0 ppb | 31.5 ppb |
| Trace Impurities – Silver (Ag) | ≤ 1.0 ppb | < 0.3 ppb |

>>> Continued on page 2 >>>

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker®

Material No.: 9673-33
Batch No.: 23D2462010

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Sodium (Na) | ≤ 500.0 ppb | 5.4 ppb |
| Trace Impurities - Strontium (Sr) | ≤ 5.0 ppb | < 0.2 ppb |
| Trace Impurities - Tin (Sn) | ≤ 5.0 ppb | < 0.8 ppb |
| Trace Impurities - Zinc (Zn) | ≤ 5.0 ppb | 0.4 ppb |

For Laboratory,Research,or Manufacturing Use

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

James T Ethier

Jamie Ethier
Vice President Global Quality

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

avantor™ | J.T.Baker®

R → 10/13/24
Met dig

M 6/21

Material No.: 9530-33
Batch No.: 0000275677
Manufactured Date: 2020/12/16
Retest Date: 2025/12/15
Revision No: 1

# Certificate of Analysis

| Test | Specification | Result |
|---|---|---|
| ACS - Assay (as HCl) (by acid-base titrn) | 36.5 - 38.0 % | 37.6 |
| ACS - Color (APHA) | <= 10 | 5 |
| ACS - Residue after Ignition | <= 3 ppm | 1 |
| ACS - Specific Gravity at 60°/60°F | 1.185 - 1.192 | 1.190 |
| ACS - Bromide (Br) | <= 0.005 % | < 0.005 |
| ACS - Extractable Organic Substances | <= 5 ppm | 1 |
| ACS - Free Chlorine (as $Cl_2$) | <= 0.5 ppm | < 0.5 |
| Phosphate ($PO_4$) | <= 0.05 ppm | < 0.03 |
| Sulfate ($SO_4$) | <= 0.5 ppm | < 0.3 |
| Sulfite ($SO_3$) | <= 0.8 ppm | 0.3 |
| Ammonium ($NH_4$) | <= 3 ppm | < 1 |
| Trace Impurities - Arsenic (As) | <= 0.010 ppm | < 0.003 |
| Trace Impurities - Aluminum (Al) | <= 10.0 ppb | < 0.2 |
| Arsenic and Antimony (as As) | <= 5 ppb | < 3 |
| Trace Impurities - Barium (Ba) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Beryllium (Be) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Bismuth (Bi) | <= 10.0 ppb | < 1.0 |
| Trace Impurities - Boron (B) | <= 20.0 ppb | < 5.0 |
| Trace Impurities - Cadmium (Cd) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Calcium (Ca) | <= 50.0 ppb | 29.7 |
| Trace Impurities - Chromium (Cr) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Cobalt (Co) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Copper (Cu) | <= 1.0 ppb | < 0.1 |
| Trace Impurities - Gallium (Ga) | <= 1.0 ppb | < 0.2 |

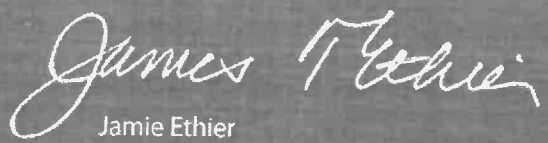
For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Material No.: 9530-33
Batch No.: 0000275677

| Test | Specification | Result |
|---|---|---|
| Trace Impurities - Germanium (Ge) | <= 3.0 ppb | < 2.0 |
| Trace Impurities - Gold (Au) | <= 4.0 ppb | < 0.2 |
| Heavy Metals (as Pb) | <= 100 ppb | < 50 |
| Trace Impurities - Iron (Fe) | <= 15.0 ppb | <1 |
| Trace Impurities - Lead (Pb) | <= 1.0 ppb | < 0.5 |
| Trace Impurities - Lithium (Li) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Magnesium (Mg) | <= 10.0 ppb | 0.4 |
| Trace Impurities - Manganese (Mn) | <= 1.0 ppb | < 0.4 |
| Trace Impurities - Mercury (Hg) | <= 0.5 ppb | 0.1 |
| Trace Impurities - Molybdenum (Mo) | <= 10.0 ppb | < 5.0 |
| Trace Impurities - Nickel (Ni) | <= 4.0 ppb | < 0.3 |
| Trace Impurities - Niobium (Nb) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Potassium (K) | <= 9.0 ppb | < 2.0 |
| Trace Impurities - Selenium (Se), For Information Only | ppb | 1.0 |
| Trace Impurities - Silicon (Si) | <= 100.0 ppb | < 10.0 |
| Trace Impurities - Silver (Ag) | <= 1.0 ppb | < 0.3 |
| Trace Impurities - Sodium (Na) | <= 100.0 ppb | < 5.0 |
| Trace Impurities - Strontium (Sr) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Tantalum (Ta) | <= 1.0 ppb | < 0.9 |
| Trace Impurities - Thallium (Tl) | <= 5.0 ppb | < 2.0 |
| Trace Impurities - Tin (Sn) | <= 5.0 ppb | < 0.8 |
| Trace Impurities - Titanium (Ti) | <= 1.0 ppb | 0.2 |
| Trace Impurities - Vanadium (V) | <= 1.0 ppb | < 0.2 |
| Trace Impurities - Zinc (Zn) | <= 5.0 ppb | 0.3 |
| Trace Impurities - Zirconium (Zr) | <= 1.0 ppb | < 0.1 |

For Laboratory, Research or Manufacturing Use
Product Information (not specifications):
Appearance (clear, fuming liquid)
Meets ACS Specifications

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

1.00132.0000 Barbituric acid for analysis EMSURE®
Batch N020065932

| | Spec. Values | | Batch Values | |
|---|---|---|---|---|
| Assay (acidimetric) | ≥ 99 | % | 99.6 | % |
| Identity (IR-spectrum) | passes test | | passes test | |
| Chloride (Cl) | ≤ 40 | ppm | ≤ 40 | ppm |
| Heavy metals (as Pb) | ≤ 50 | ppm | ≤ 50 | ppm |
| Fe (Iron) | ≤ 10 | ppm | ≤ 10 | ppm |
| Sulfated ash | ≤ 0.1 | % | ≤ 0.1 | % |
| Loss on Drying (105 °C) | ≤ 0.1 | % | ≤ 0.1 | % |
| Suitability as reagent (for cyanide determination) | passes test | | passes test | |

Date of release (DD.MM.YYYY) 17.04.2020
Minimum shelf life (DD.MM.YYYY) 30.04.2025

Ioannis Chartomatsidis
Responsible laboratory manager quality control

This document has been produced electronically and is valid without a signature.

Sodium Phosphate, Monobasic, Monohydrate,
Crystal
BAKER ANALYZED® A.C.S. Reagent

(sodium dihydrogen phosphate, monohydrate)

Material No.: 3818-05
Batch No.: 0000225799
Manufactured Date: 2018/12/05
Retest Date: 2025/12/03
Revision No: 1

# Certificate of Analysis

Meets ACS Reagent Chemical Requirements,

| Test | Specification | Result |
|---|---|---|
| Assay ($NaH_2PO_4 \cdot H_2O$) | 98.0 - 102.0 % | 99.5 |
| pH of 5% Solution at 25°C | 4.1 - 4.5 | 4.3 |
| Insoluble Matter | <= 0.01 % | < 0.01 |
| Chloride (Cl) | <= 5 ppm | < 5 |
| ACS - Sulfate ($SO_4$) | <= 0.003 % | < 0.003 |
| Calcium (Ca) | <= 0.005 % | <0.005 |
| Potassium (K) | <= 0.01 % | < 0.01 |
| Heavy Metals (as Pb) | <= 0.001 % | < 0.001 |
| Trace Impurities - Iron (Fe) | <= 0.001 % | < 0.001 |

For Laboratory, Research or Manufacturing Use
Meets Reagent Specifications for testing USP/NF monographs

Country of Origin: IN
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

# Certificate of Analysis

# Sodium Hydroxide (Pellets)

**Material:** 0583

**Grade:** ACS GRADE

**Batch Number:** 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

| TEST | SPECIFICATION | ANALYSIS | DISPOSITION |
|---|---|---|---|
| Calcium | <= 0.005 % | <0.005 % | PASS |
| Chloride | <= 0.005 % | 0.002 % | PASS |
| Heavy Metals | <= 0.002 % | <0.002 % | PASS |
| Iron | <= 0.001 % | <0.001 % | PASS |
| Magnesium | <= 0.002 % | <0.002 % | PASS |
| Mercury | <= 0.1 ppm | <0.1 ppm | PASS |
| Nickel | <= 0.001 % | <0.001 % | PASS |
| Nitrogen Compounds | <= 0.001 % | <0.001 % | PASS |
| Phosphate | <= 0.001 % | <0.001 % | PASS |
| Potassium | <= 0.02 % | <0.02 % | PASS |
| Purity | >= 97.0 % | 99.2 % | PASS |
| Sodium Carbonate | <= 1.0 % | 0.5 % | PASS |
| Sulfate | <= 0.003 % | <0.003 % | PASS |

Internal ID #: 710

## Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

## Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

# Certificate of Analysis

# Sodium Hydroxide (Pellets)

**Material:** **0583**

**Grade:** **ACS GRADE**

**Batch Number:** **23B1556310**

| | | | |
|---|---|---|---|
| Chemical Formula: | NaOH | Manufacture Date: | 12/14/2022 |
| Molecular Weight: | 40 | Expiration Date: | 12/31/2025 |
| CAS #: | 1310-73-2 | | |
| Appearance: | | Storage: | Room Temperature |

Pellets

Spec Set: 0583ACS

Internal ID #: 710

## Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

## Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

LabChem
Part of TCP Analytical Group
Jackson's Pointe Commerce Park- Building 1000
1010 Jackson's Pointe Court, Zelienople, PA 16063

# Certificate of Analysis

## Cyanide Standard 1000 ppm (1ml = 1mg CN)

Product Code: **LC13545**

Manufacture Date: August 01, 2024

Lot Number: **44080060**

Expiration Date: January 30, 2025

| Test | Specification | Result |
|---|---|---|
| Appearance (clarity) | clear solution | clear solution |
| Appearance (color) | colorless | colorless |
| Concentration (CN) | 0.990 - 1.010mg/mL | 1.008mg/mL |
| Concentration (CN) | 990 - 1,010ppm | 1,008ppm |
| Traceable to NIST SRM | Report | 999b |

***Intended Use*** *- Product is intended for use in manufacturing procedures and laboratory procedures and protocols.*

***Storage Information*** *- Unless noted on the product label, store the product under normal lab conditions in its tightly closed, original container. Do not pipet directly from the container or return unused portions to the container.*

***Instructions for Handling and Use -*** *Please refer to the associated product label and Safety Data Sheet (SDS) for information regarding safety and handling of this product.*

***Preparation -*** *All products are manufactured and tested according to established, documented procedures and methodology. Production documentation records manufacturing data, raw material traceability and testing history on a per lot basis. Balances, thermometers, and glassware are calibrated before first use and on a regular schedule with references traceable to NIST standards.*

***The suffix of the product code may differ from what is on your product label. The suffix will designate the size and be associated with a numeric digit(s). Visit LabChem.com for more information***

| Suffix | 1 | 2 | 3/3S/36/36S | 4/4C | 5 | 6 | 7 | 8 | 9 | 20 | 44 | 200 | 246 | 486 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Size | 500mL or g | 1L or 1kg | 2.5L/2.5L Coated/6x2.5L/6x2.5L Coated | 4L | 20L | 10L | 125mL | 25g | 100g | 20x20mL | 4x4L | 200L | 24x6mL | 48x6mL |

Michael Monteleone

*Michael Monteleone*
*Chemistry Supervisor - Quality Control*

*ISO9001:2015 Registration #0306-01*

2024080113:32:16bsturges-0-0

ThermoFisher SCIENTIFIC

# Certificate of Analysis

W3139 Received on 9/9/24 by IZ

| | |
|---|---|
| Product No.: | A12044 |
| Product: | Chloramine-T trihydrate, 98% |
| Lot No.: | 10239484 |

| | |
|---|---|
| Appearance: | White powder |
| Melting Point: | 166°C(dec) |
| Assay (Iodometric titration): | 100.5% |
| Identification (FTIR): | Conforms |

Order our products online **thermofisher.com/chemicals**

**This document has been electronically generated and does not require a signature.**

RICCA CHEMICAL COMPANY®
W3154 Rec. on 12/2/24 by IZ

448 West Fork Dr
Arlington, TX 76012
http://www.riccachemical.com
1-888-GO-RICCA
customerservice@riccachemical.com

# Certificate of Analysis

## Cyanide Standard, 1000 ppm $CN^-$

**Lot Number:** 1411J58 **Product Number:** 2543

**Manufacture Date:** NOV 22, 2024
**Expiration Date:** MAY 2025

This standard is prepared using accurate volumetric techniques from material that has been assayed against Silver Nitrate solution certifiec traceable to NIST Standard Reference Material 999. The certified value reported is the prepared value based upon the method of preparation of the material. The uncertainty in the prepared value is the combined uncertainty based on the stability of the assayed Potassium Cyanide, and the uncertainty in the mass and volume measurements.
Use 0.16% (w/v) (0.04 N) Sodium Hydroxide or 0.225 % (w/v) (0.04 N) Potassium Hydroxide to make dilutions of this standard. Restandardize weekly if extreme accuracy is required.

| Name | CAS# | Grade |
|---|---|---|
| Water | 7732-18-5 | ACS/ASTM/USP/EP |
| Potassium Cyanide | 151-50-8 | ACS |
| Sodium Hydroxide | 1310-73-2 | Reagent |

| Test | Specification | Result |
|---|---|---|
| Appearance | Colorless liquid | Passed |
| Cyanide ($CN^-$) | 995-1005 ppm | 1000 ppm |

| Specification | Reference |
|---|---|
| Stock Standard Cyanide Solution | APHA (4500-CN- F) |
| Stock Cyanide Solution | APHA (4500-CN- E) |
| Stock Cyanide Solution | APHA (4500-CN- K) |
| Stock Cyanide Solution | APHA (4500-CN- H) |
| Cyanide Reference Solution (1000 mg/L) | EPA (SW-846) (7.3.3.2) |
| Cyanide Calibration Stock Solution (1,000 mg/L CN-) | EPA (SW-846) (9213) |
| Stock Cyanide Solution | EPA (335.3) |
| Stock Cyanide Solution | EPA (335.2) |
| Cyanide Solution Stock | ASTM (D 4282) |
| Simple Cyanide Solution, Stock (1.0 g/L CN) | ASTM (D 4374) |

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) |
|---|---|---|
| 2543-16 | 500 mL amber poly | 6 months |
| 2543-32 | 1 L amber poly | 6 months |
| 2543-4 | 120 mL amber poly | 6 months |

**Recommended Storage:** 2°C - 8°C (36°F - 46°F)

Luis Briceno (11/22/2024)
Operations Supervisor


# SHIPPING DOCUMENTS

# CHEMTECH
## CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax (908) 789-8922
www.chemtech.net

Chemtech Project Number: Q1152
COC Number:

### CLIENT INFORMATION

Report to be sent to:
COMPANY: TANAGRO Jewlery Corp
ADDRESS: 36 W 49th St Room 101
CITY: NEW YORK STATE: NY ZIP: 10016
ATTENTION:
PHONE: FAX:

### PROJECT INFORMATION

PROJECT NAME: SEMI ANNUAL
PROJECT #: LOCATION:
PROJECT MANAGER:
E-MAIL:
PHONE: FAX:

### BILLING INFORMATION

BILL TO: PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION:
PHONE:

### DATA TURNAROUND INFORMATION

FAX (RUSH) 10 DAYS*
HARDCOPY (DATA PACKAGE): _____ DAYS*
EDD: _____ DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

### DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ EDD FORMAT _____
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced ☐ US EPA CLP
- ☐ NYS ASP A ☐ NYS ASP B
- ☐ Other _____

### ANALYSIS

1 Metals 2 Cyanide 3 Cyanide 4 5 6 7 8 9

| CHEMTECH SAMPLE ID | PROJECT SAMPLE IDENTIFICATION | SAMPLE MATRIX | SAMPLE TYPE COMP | SAMPLE TYPE GRAB | SAMPLE COLLECTION DATE | SAMPLE COLLECTION TIME | # of Bottles | PRESERVATIVES 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. | EFF-DAY-1-METALS | W | | | 1/28 | 9:00 | | | | | | | | | | | |
| 2. | EFF- DAY-1-1-CN | W | | | 1/28 | 9:00 | | | | | | | | | | | |
| 3. | EFF-DAY-1-2CN | W | | | 1/28 | 10:00 | | | | | | | | | | | |
| 4. | EFF-DAY1-3CN | W | | | 1/28 | 11:00 | | | | | | | | | | | |
| 5. | EFF-DAY1-4CN | W | | | 1/28 | 12:00 | | | | | | | | | | | |
| 6. | | | | | | | | | | | | | | | | | |
| 7. | | | | | | | | | | | | | | | | | |
| 8. | | | | | | | | | | | | | | | | | |
| 9. | | | | | | | | | | | | | | | | | |
| 10. | | | | | | | | | | | | | | | | | |

PRESERVATIVES: 1 2 3 4 5 6 7 8 9

COMMENTS: <—Specify Preservatives
A-HCl D-NaOH
B-HNO3 E-ICE
C-H2SO4 F-OTHER

### SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

| RELINQUISHED BY SAMPLER | DATE/TIME | RECEIVED BY |
|---|---|---|
| 1. | 11/28/25 | 1. |
| RELINQUISHED BY | DATE/TIME 10:26 | RECEIVED BY |
| 2. | 1-29-25 | 2. |
| RELINQUISHED BY | DATE/TIME | RECEIVED FOR LAB BY |
| 3. | | 3. |

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 2.4°C
Comments: JR Comment 1

Page _____ of _____

CLIENT: ☐ Hand Delivered ☐ Other: _____
CHEMTECH: ☐ Picked Up

Shipment Complete ☐ YES ☐ NO

10/2021

WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

**CHEMTECH** 284 Sheffield Street Mountainside, NJ 07092

## Laboratory Composite Sample log

Chemtech Project number: Q1152 Date: 1-29-25

Client Name: Tonaglo Jewelry Corp. Client Project Name: Semi Annual

Instructions: Composite Cyanide Samples 4:1

Sample Custodian:

| Client Sample ID | Weigh /Volume used | New ID | Sample Description | Sample Composite time | Comments |
|---|---|---|---|---|---|
| EFF-DAY-1-1-CN | 125ml | EFF-DAY-1-1-4CN | "CLEAR WATER" | 1136 | 125ml x 4 = 500ml |
| 1-2-CN | | | | | |
| 1-3-CN | | | | | |
| 1-4-CN | | | | | |

CHEMTECH 284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

# Laboratory Certification

| Certified By | License No. |
|---|---|
| | |
| CAS EPA CLP Contract | 68HERH20D0011 |
| | |
| Connecticut | PH-0830 |
| | |
| DOD ELAP (ANAB) | L2219 |
| | |
| Maine | 2024021 |
| | |
| Maryland | 296 |
| | |
| New Hampshire | 255424 Rev 1 |
| | |
| New Jersey | 20012 |
| | |
| New York | 11376 |
| | |
| Pennsylvania | 68-00548 |
| | |
| Soil Permit | 525-24-234-08441 |
| | |
| Texas | T104704488 |