



Cardinal Health  
1222 Sherwood Road  
Norfolk, NE 68701  
402.371.9010 main

cardinalhealth.com

## CERTIFICATE OF COMPLIANCE

TO: Tri Tech Forensics

P.O. NO. 90155

LOT NO. 135471

ITEM: 8881352796

QUANTITY: 100,000

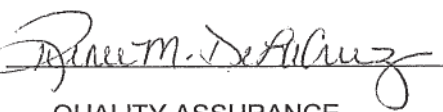
DRAWING NO. NA

CUSTOMER PART NO. NA

THIS IS TO CERTIFY THAT THE MATERIAL SHIPPED ON THE NOTED PURCHASE ORDER WAS MADE IN ACCORDANCE TO BLUEPRINTS, SPECIFICATIONS AND PERTINENT REQUIREMENTS AS SPECIFIED BY CARDINALHEALTH. INDIVIDUAL INSPECTION RECORDS ARE AVAILABLE UPON REQUEST FOR SPECIFIC LOTS.

21MAR2022

DATE

BY: 

QUALITY ASSURANCE

Cardinal Health  
1222 Sherwood Road  
Norfolk, NE 68701  
402.371.9010 main



cardinalhealth.com

**CERTIFICATE OF STERILITY**  
**Blood Collection**

To:

This is to certify that the product meets all the sterility requirements as specified by Cardinal Health with a sterility assurance level of  $10^{-3}$ . The lot was Gamma radiation sterilized and dosimetric released in accordance with Cardinal Health procedures, the AAMI recommended practice and the Quality System Regulation (QSR). All dosimetry requirements were satisfied, and the dosimetry is traceable to a recognized standard.

Item TT-BCS GRA 16X100 10ML P.O.-F

LOT NO. 135471

HRI No. 8881352796

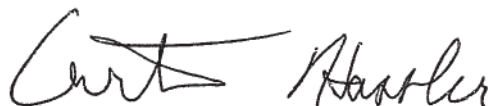
Sterilization Date: 1/05/2022

The Sterilization Process at Cardinal Health has been established and validated in accordance with ISO 11137, Sterilization of Healthcare Products. All established dosage requirements are traceable to this nationally recognized standard.


Products to be sterilized are separated into product families based on product characteristics. Validation is conducted for each product family. Periodic monitoring is conducted via dose audits and bio-burden testing. The frequency of testing is based on the requirements of ISO 11137.

The Sterility Assurance Level (SAL) for the sterilized products is established in accordance with ANSI/AAMI ST67:2011, Sterilization of health care products-Requirements and guidance for selecting a sterility assurance level (SAL) for products labeled "sterile"

All validation data and individual protocols are maintained at Cardinal Health.

By:   
Sterilization

DATE: 3-3-22

By:   
Quality Assurance

DATE: 21 MAR 2022

BLOOD COLLECTION LOT CONTROL  
FINAL TUBE ASSAY RELEASE  
GS10001646

LOT NO.: 135471 HRI NO.: 8881-352796

TEST RESULTS

**COPY**

SODIUM FLUORIDE: A5414, A5400-1  
POTASSIUM OXALATE: A5410, A5409

LOT # 135471  
HRI: 8881-352796  
ASSAY: POTASSIUM OXALATE  
Tested: 1/4/2022  
NOTEBOOK REF: Tube Assay BK #01  
SPECIFICATION: 15.0 - 26.0mg/tube

Lot: 135471  
HRI: 8881-352796  
ASSAY: SODIUM FLUORIDE  
Tested: 3/17/2022  
NOTEBOOK REF: Tube Assay BK#01  
SPECIFICATION: 88.0 -112.0 mg/tube

ml titer	mg/tube	mg/tube	
25.70	22.74 P	90.6	P
22.10	19.56 P	93.6	P
21.60	19.12 P	91.8	P
23.75	21.02 P	93.5	P
22.70	20.09 P	89.9	P
23.80	21.06 P	90.5	P
24.95	22.08 P	91.1	P
23.30	20.62 P	99.3	P
25.90	22.92 P	92.0	P
24.30	21.50 P	91.4	P

MEAN: 21.07  
STD DEV: 1.278

MEAN: 92.3  
STD DEV: 2.731

TESTED BY: Staci Hingst

TESTED BY: Megan Hanson  
Staci Hingst

*Staci Hingst*  
*Mt Hanson*  
*3-18-22* *3-18-22*

*Staci Hingst*  
*3-18-22*  
*Mt Hanson*  
*3-18-22*

RELEASED BY: *[Signature]* DATE: 18 MAR 2022

FM20008183 Rev 3

ORIGINAL

*Julian Burton* 12-8-21  
 QA APPROVED  
*Allen* 3-24-22

Certificate of Analysis

**COPY**

1 Reagent Lane  
 Fair Lawn, NJ 07410  
 201.796.7100 tel  
 201.796.1329 fax

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

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

Catalog Number	S299	Quality Test / Release Date	06/01/2021
Lot Number	212959		
Description	SODIUM FLUORIDE, A.C.S.		
Country of Origin	India	Suggested Retest Date	Nov/2023

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	WHITE POWDER
ASSAY	%	>= 99	100
CHLORIDE	%	<= 0.005	<0.005
HEAVY METALS (as Pb)	%	<= 0.003	<0.003
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.02	<0.02
IRON (Fe)	%	<= 0.003	<0.003
LOSS ON DRYING @ 105 C	%	<= 0.3	<0.3
POTASSIUM (K)	%	<= 0.02	<0.02
SODIUM FLUOSILICATE	%	<= 0.1	<0.1
SULFATE (SO4)	%	<= 0.03	<0.03
SULFITE	%	<= 0.005	<0.005
TITRATABLE ACID	MEQ/G	<= 0.03	<0.03
TITRATABLE BASE	MEQ/G	<= 0.01	<0.01

*Julian Burton*

Julian Burton - Quality Control Manager - Fair Lawn

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

ORIGINAL

*Handwritten signature* 8-10-21

Certificate of Analysis  
**ThermoFisher**  
SCIENTIFIC

QA APPROVED  
*Handwritten signature* 8/12/21

Page 1 of 1

Certificate of Analysis

**COPY**

1 Reagent Lane  
Fair Lawn, NJ 07410  
201.796.7100 tel  
201.796.1329 fax

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Standard ISO9001:2015 by SAI Global Certificate Number CERT - 0120632

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Catalog Number	S299	Quality Test / Release Date	09/29/2020
Lot Number	204187		
Description	SODIUM FLUORIDE, A.C.S.		
Country of Origin	India	Suggested Retest Date	Sep/2025

N/A			
Result Name	Units	Specifications	Test Value
APPEARANCE		REPORT	White powder
ASSAY	%	>= 99	101
CHLORIDE	%	<= 0.005	<0.005
HEAVY METALS (as Pb)	%	<= 0.003	<0.003
IDENTIFICATION	PASS/FAIL	= PASS TEST	PASS TEST
INSOLUBLE MATTER	%	<= 0.02	0.01
IRON (Fe)	%	<= 0.003	<0.003
LOSS ON DRYING @ 105 C	%	<= 0.3	0.02
POTASSIUM (K)	%	<= 0.02	0.001
SODIUM FLUOSILICATE	%	<= 0.1	<0.1
SULFATE (SO4)	%	<= 0.03	<0.03
SULFITE	%	<= 0.005	<0.005
TITRATABLE ACID	MEQ/G	<= 0.03	<0.03
TITRATABLE BASE	MEQ/G	<= 0.01	<0.01

*Julian Burton*

Julian Burton - Quality Control Manager - Fair Lawn

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



# CERTIFICATE OF ANALYSIS

Printed: 6/17/2021

Page 1 of 1

Customer No : 30248

Customer : VWR  
INTERNATIONAL

Customer PO : 4512973665

Order Number : 3372806

Delivery # : 121345329

Lot : 2JF0247

Catalog : P1355

Potassium Oxalate, Monohydrate, Crystal,  
Reagent, ACS

**COPY**

Chemical Formula :  $(\text{COOK})_2 \cdot \text{H}_2\text{O}$   
CAS# : 6487-48-5

Formula Weight : 184.23

**ORIGINAL**

QA APPROVED

*Handwritten signature and date: 8-3-21*

## Test

Limit  
Min. Max.

## Results

Test	Limit Min. Max.	Results
ASSAY ( $\text{K}_2\text{C}_2\text{O}_4 \cdot \text{H}_2\text{O}$ )	98.5 - 101.0 %	99.7 %
NEUTRALITY	-- TO PASS TEST	PASSES TEST
SUBSTANCES DARKENED BY HOT $\text{H}_2\text{SO}_4$	-- TO PASS TEST	PASSES TEST
INSOLUBLE MATTER	-- 0.01 %	0.002 %
CHLORIDE (Cl)	-- 0.002 %	0.001 %
SULFATES ( $\text{SO}_4$ )	-- 0.01 %	0.004 %
AMMONIUM ( $\text{NH}_4$ )	-- 0.002 %	0.001 %
HEAVY METALS (as Pb)	-- 0.002 %	0.0005 %
IRON (Fe)	-- 0.001 %	0.0006 %
SODIUM (Na)	-- 0.02 %	0.0044 %
EXPIRATION DATE		31-AUG-2023
DATE OF MANUFACTURE		01-AUG-2019
APPEARANCE		WHITE CRYSTALLINE POWDER

All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia at time of release.

Read and understand label and MSDS/SDS before handling any chemical. All Spectrum's chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. The customer must ensure to provide its users adequate hazardous material training and appropriate protective equipment before handling our chemicals.

Certificate of Analysis Results Certified By

*Jigisha Patel*

**spectrum**<sup>®</sup>  
CHEMICAL MFG CORP  
Trusted Since 1971

Corporate Office:  
755-769 Jersey Ave.  
New Brunswick, NJ 08901  
(732) 214-1300

West Coast Plant:  
14422 S. San Pedro St.  
Gardena, CA 90248  
(310) 516-8000

Jigisha Patel  
VP Regulatory Compliance & Technical Services,  
Regulatory  
New Brunswick, NJ 08901



# CERTIFICATE OF ANALYSIS

Printed: 7/12/2021

Page 1 of 1

Customer No : 30248

Customer : VWR  
INTERNATIONAL

Customer PO : 4512973665

Order Number : 3372806

Delivery # : 122803337

Lot : 2KD0268

Catalog : P1355

Potassium Oxalate, Monohydrate, Crystal,  
Reagent, ACS

**COPY**

Chemical Formula :  $(\text{COOK})_2 \cdot \text{H}_2\text{O}$   
CAS# : 6487-48-5

**ORIGINAL**

Formula Weight : 184.23

*Approved 7-15-21*  
**QA APPROVED**  
*A.J. vnt 8321*

Test	Limit		Results
	Min.	Max.	
ASSAY ( $\text{K}_2\text{C}_2\text{O}_4 \cdot \text{H}_2\text{O}$ )	98.5	101.0 %	99.77 %
NEUTRALITY	--	TO PASS TEST	PASSES TEST
SUBSTANCES DARKENED BY HOT $\text{H}_2\text{SO}_4$	--	TO PASS TEST	PASSES TEST
INSOLUBLE MATTER	--	0.01 %	0.002 %
CHLORIDE (Cl)	--	0.002 %	0.001 %
SULFATES ( $\text{SO}_4$ )	--	0.01 %	0.004 %
AMMONIUM ( $\text{NH}_4$ )	--	0.002 %	0.001 %
HEAVY METALS (as Pb)	--	0.002 %	0.0005 %
IRON (Fe)	--	0.001 %	0.0006 %
SODIUM (Na)	--	0.02 %	0.0044 %
EXPIRATION DATE			31-AUG-2024
MANUFACTURE DATE			01-AUG-2020

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(310) 516-8000

Jigisha Patel  
VP Regulatory Compliance & Technical Services,  
Regulatory  
New Brunswick, NJ 08901



### **TUG10 OEM Statement**

The Tri-Tech Forensics, Inc. (TTF) gray stoppered 10ml blood tubes, product number TUG10 are made under TTF FDA 510(K) number K922342. These tubes are privately labeled and manufactured by Cardinal Health solely for Tri-Tech Forensics and are Cardinal Health product number 8881352796.

#### Tube Specifications

10ml – 16x100 mm

Potassium Oxalate = 15.0 - 26.0 mg/tube

Sodium Fluoride = 88.0 – 112.0 mg/tube

Sincerely

A handwritten signature in blue ink that reads "Eric A. Barton".

Eric Barton  
Vice President





May 9th, 2022

Washington State Patrol  
Toxicology Laboratory Division  
2203 Airport Way S  
Seattle WA, 98134

RE: Washington State Blood Alcohol Collection Kits

Blood Alcohol Collection Kits  
Reorder Number: BA-2WA

TTF Lot No.	Kit Serial No.	Kit Exp.	Tube Lot No.	Tube Exp.	Prep Pad Exp.
68109	N/A	11/30/2023	135471	11/30/2023	N/A

RECEIVED  
JUL 22 2024  
WSP TOX LAB