Crystel

Certificate of Analysis

Product Name:	**Crystel GOLD CRY 101**
Reference:	CRY/GOL/019
Batch Number:	WO45654
Date of Manufacture:	2018-05-30
Expiry Date:	2020-05-30

This is to certify that Crystel Gold solution above was tested on 2018-05-30 and found to comply with all requirements as set out in the specifications and method of analysis.

PROPERTIES	SPECIFICATION	RESULTS
APPEARANCE	Clear and free from suspended matter	Conforms
ODOUR	Alcohol like	Conforms
SPECIFIC GRAVITY	0.870 – 0.890	0.874
STERILITY	No growth	Conforms
IRRADIATION	Achieves minimum dose	Conforms
ENDOTOXIN	<0.25EU/ml	<0.1
	Recovery 50-200%	141%

Completed By:

Quality Department: C Andrews

Date: 2018-08-10

Reviewed By:

Date: 2018-08-10

DRF1574 CRY/GOL/006/Issue4/Sept2012

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ASSOCIATES OF CAPE COD INTERNATIONAL

Specialists in Endotoxin and Glucan Detection

Sterility Testing Analytical Report

Please note the results below are not generated at Associates of Cape Cod Int. Inc., but reported from a subcontractor's final report.

Sample ID: CRY101 Gold
Lot No: WO45654
ICN: 0718012D
Subcontractor's Report Number: 2018133729

Lab Book Reference: ST03-180
Date Received: 16 JUL 2018
Date Completed: 08 AUG 2018
No. of samples: 10

Sterility Test – Membrane Filtration

Medium	Result
Tryptone Soy Broth	No Growth
Fluid Thioglycollate Medium	No Growth

Conclusions:

The samples submitted comply with the test for sterility in accordance with the client's methodology.

Results Reported by:

L Ellis ..... Date: 08 AUG 2018

Laboratory Technician/Designee: L Ellis

Reviewed by:

D Mellard ..... Date: 08 Aug 2018

- ☑ Quality Assurance Manager
- ☐ UK General Manager
- ☐ Technical Manager
- ☐ Laboratory Manager

QA Approved by:

A Roberts ..... Date: 10 AUG 2018

- ☑ Quality Assurance
- ☐ UK General Manager
- ☐ Technical Manager

Revision History:

DCCF No:	Revision:	Description:	Originator:	Effective Date:
NA	1	Revision 1, no changes	L Ellis	08 AUG 2018

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ASSOCIATES OF CAPE COD INTERNATIONAL

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LIMULUS AMEBOCYTE LYSATE (LAL) ANALYTICAL REPORT
Release Test - Kinetic Turbidimetric Method (SOPCTS012)

Sample ID:CRY101 Gold
Lot No:WO45654
ICN No:0718012D

Lab Book Reference:EL189-96-B
Date Received:16 JUL 2018
Date Completed:18 JUL 2018

Reagents

Pyrotell®-T: Lot Number 517-10-848-T. Pyrotell®-T was reconstituted with Pyrosol® Buffer and used to Assay all dilutions.

Pyrosol® Buffer: Lot Number 226-425.

LAL Reagent Water (LRW): Lot Number AC10244546. LRW was used to reconstitute endotoxin, prepare dilutions of endotoxin and sample(s), and serve as the negative control.

Instrumentation: Pyros Kinetix Incubating Kinetic Tube Reader; S/N; 3G-1166.

Control Standard Endotoxin (CSE): Lot Number 159, The potency of the CSE is 14 EU/ng when measured against Reference Standard Endotoxin (RSE), lot number H0K354 (Food and Drug Administration, CBER) with Pyrotell®-T lot number 517-10-848-T.

The sensitivity of the assay is the lowest concentration of CSE used to construct the calibration curve. A series of 10-fold dilutions between 0.001 and 1.0 EU/mL was tested in duplicate and the results were used to construct the standard curve.

Preparation and Testing of Sample: The samples were diluted with LRW and analysed at a 1:100 dilution, in accordance with validation EL168-03. Positive product controls were tested, in parallel, on sample dilutions spiked with an Endotoxin concentration of 0.1 EU/ml. The sample to lysate ratio was 4:1.

Results: The Release Test is performed according to a validated method and is used to release finished products. The test can also be performed for release of raw/in-process materials. The absolute value for the correlation coefficient for the regression of log onset time versus log endotoxin concentration was greater than or equal to 0.980. The negative control (LRW) was tested in duplicate and contained less than 0.001 EU/mL. Inhibition or enhancement of the bacterial Endotoxin test by the sample is absent if the concentration of the Endotoxin assayed in the Positive Product Controls are within 50% to 200% of the nominal concentration.

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Sample Results:

Sample Identification	% Spike Recovery	EU/ml
WO45654	141	<0.1

All Samples analysed passed the specification of < 0.25 EU/ml.

Approval:

Techncian:..... **Date:** 18JUL2018
Laboratory Technician: L Ellis

Reviewed By:..... **Date:** 19JUL2018
☐ Review Board
☐ Laboratory Manager

QA Approval:..... **Date:** 19 Jul 2018
☐ Review Board

References:

Associates of Cape Cod SOPCTS012, *General Kinetic LAL Turbidimetric Assay*

United States Pharmacopoeia <85> *Bacterial Endotoxins Test*

European Pharmacopoeia, *Section 2.6.14.*

Revision History:

DCCF No:	Revision:	Description:	Originator	Effective Date:
NA	1	Revision 1 No Changes	L Ellis	18JUL2018

STERIS

http://www.steris-ast.com

Certificate of Irradiation

Date Issued: 08-Jul-2018 UK33S12133266-1-2

This is to certify that AST Daventry Synergy Health PLC, a STERIS Company has where appropriate delivered an irradiation process in accordance with the current certified standards:

EN ISO 11137-1 Sterilisation of Health Care Products
EN ISO 13485 Quality System - Medical Devices

The Tristel Company Ltd
Unit 4C Lynx Bus Park, Fordham Rd
Newmarket
Suffolk CB8 7NY
UNITED KINGDOM

Order Information

Account Number:	100708
Synergy Health Sales Part Reference:	1108717
Customer Reference Number:	707546
Product Description:	ALCOHOL 1 LTR TRIGGER SPRAY DV4778 20-45kGy
Validation Reference:	4778
Quantity Received:	159
Customer Minimum Specification kGy:	20.0
Customer Maximum Specification kGy:	45.0
Customer Unit Lot/Batch Number:	BN: W045654, 3 PLTS

Irradiation Data

Date and Time of Irradiation:	08-Jul-2018 20:31
Reference Dose Range kGy:	33.7 - 34.5
Calculated Minimum Dose kGy:	27.3
Calculated Maximum Dose kGy:	39.8

Irradiation Release Authorised By Synergy Health Sterilisation UK, a STERIS Company