Docusign Envelope ID: 155497A6-CB4D-4C70-A9D3-DC34A87AACFE

TILRAY	CERTIFICATE OF ANALYSIS	
Quality Standard Number: 3010-QS-QC-000049, R9	**Packaging Date: 16SEP24** **DOM: 03SET24**	**Page 1 of 4**
Product Name: **Tilray Cannabisextrakt THC5:CBD20**	**Batch Size: 456 Units of 25 mL**	**Revision: 1**
Lot: 24006304	☒ **Expiry Date: 07/2025** ☐ **Retest Date:**	
CoA Number: 1024-014		

APPROVALS

Prepared by:

Daniel Tavares
Quality Control Chemist Associate

Signed by:
Daniel Tavares
Signer Name: Daniel Tavares
Signing Reason: I am the author of this document
Signing Time: 2024/10/11 | 16:50 BST
73F4B38D267E4454A05B05EE0E018BB8

Date: 2024/10/11 | 16:50 BST

Reviewed by:

Rita Andrade
Quality Control Supervisor

Signed by:
Olga Santos
Signer Name: Olga Santos
Signing Reason: I have reviewed this document
Signing Time: 2024/10/13 | 21:35 BST
427D7A8AC26141988FCEC4820E20BD39

Date: 2024/10/13 | 21:36 BST

Approved by:

Sandra Vieira
Qualified Person

Assinado por:
Sandra Vieira
Nome do signatário: Sandra Vieira
Motivo da assinatura: Aprovo este documento
Hora de assinatura: 2024/10/14 | 10:05 BST
140965A075F74EF98AC58E25D88ED7A7

Date: 2024/10/14 | 10:07 BST

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Certificate of Analysis

Test		Acceptance Criteria	Procedure	Result
Physical Properties:				
Appearance		Free of particles /homogeneous /transparent greenish or yellow to brown solution.	3010-TM-QC-000012 Ph.Eur.2.8.2	Complies
Fill Volume		25.0 mL/bottle + 2% (25.0 – 25.5 mL)	Gravimetric	Complies 25.3 mL(25.2–25.4 mL)
Chemistry:				
Identification – THC, THCA, CBD and CBDA		Retention times correspond to that in a standard chromatogram. Positively identified.	3010-TM-QC-000014 Ph.Eur.2.2.46	Complies
Assay (Relative to weight of product)	THC	Total THC – (THC+(THCA*0.877)) -(mg/mL) 90 – 110% of label claim in mg/mL (4.50 mg/mL – 5.50 mg/mL) Report THCA: mg/mL (w/v) Report Total THC% (w/w) (Calculated as per measured density)	3010-TM-QC-000014 Ph.Eur.2.2.46	96% (4.82 mg/mL) Not detected (<0.0013 mg/mL(LoD)) 0.5% (w/w)
	CBD	Total CBD – (CBD+(CBDA*0.877)) -(mg/mL) 90 – 110% of label claim in mg/mL (18.0 mg/mL – 22.0 mg/mL) Report CBDA: mg/mL (w/v) Report Total CBD% (w/w) (Calculated as per measured density)	3010-TM-QC-000014 Ph.Eur.2.2.46	99% (19.8 mg/mL) 0.2 mg/mL 2.1% (w/w)
Related Substances (Relative to combined weight of active ingredients)		CBN ≤ 2.5% (w/w) Total related substances – Report only	3010-TM-QC-000014 Ph.Eur.2.2.46	0.3% (w/w) 0.3% (w/w)
Water Content		≤ 0.5% (w/w)	3010-TM-QC-000013 Ph.Eur.2.5.12	0.1% (w/w)

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Lot: 24006304	☒ **Expiry Date: 07/2025** ☐ **Retest Date:**	
CoA Number: 1024-014		

Test	Acceptance Criteria	Procedure	Result
Elemental Impurities	Arsenic ≤ 1.5 ppm Cadmium ≤ 0.5 ppm Lead ≤ 0.5 ppm Mercury ≤ 0.1 ppm	3010-TM-QC-000009 Ph.Eur.2.4.27	< 0.2186 ppm (LoQ) < 0.2249 ppm (LoQ) < 0.0752 ppm (LoQ) < 0.0157 ppm (LoQ)
Residual Solvents	≤ 0.5% (w/w)	Third Party Ph.Eur.2.4.24	Ethanol: <0.04% (LoQ) n-Hexane: <0.0023%(LoQ)
Pesticide Residues	Complies	Third Party Ph.Eur.2.8.13	Complies[1]
Mycotoxins:			
Aflatoxins	B1 ≤ 2 µg/Kg B1 + B2 + G1 + G2 ≤ 4 µg/Kg	3010-TM-QC-000004 Ph.Eur.2.8.18	Not Detected (<0.28 µg/Kg (LoD) Not Applicable
Microbiology:			
TAMC	≤1x10^3 CFU/g or mL Maximum Acceptable Count = 2000	Third Party Ph. Eur. 2.6.12	<10 CFU/g
TYMC	≤1x10^2 CFU/g or mL Maximum Acceptable Count = 200	Third Party Ph. Eur. 2.6.12	<10 CFU/g
Bile-tolerant gram-negative bacteria	≤1x10^2 CFU/g or mL Maximum Acceptable Count = 200	Third Party Ph. Eur. 2.6.31	<10 CFU/g
Salmonella	Absence (25 g or 25 mL)	Third Party Ph. Eur. 2.6.31	Absent/25g
Escherichia coli	Absence (1 g or 1 mL)	Third Party Ph. Eur. 2.6.31	Absent/g
Staphylococcus aureus	Absence (1 g or 1 mL)	Third Party Ph. Eur. 2.6.13	Absent/g
Pseudomonas aeruginosa	Absence (1 g or 1 mL)	Third Party Ph. Eur. 2.6.13	Absent/g

[1]Periodic testing based on the 3010-RA-QA-000138 and 3010-RA-QA-000137.

☒ **Physical and chemical properties** – (Internal) Performed under manufacturing license in premises located at *Parque Tecnológico de Cantanhede, PME Building, Núcleo 4 – Lote 4A, Laboratórios L01, 3060-197 Cantanhede.*

☐ **Identification DAB Monograph Cannabis flos - Test B:** LEF (3rd Party laboratory) - *Infosaúde – Instituto de Formação e Inovação em Saúde, Unipessoal, Lda*

☒ **Microbiology testing:** LEF (3rd Party laboratory) - *Infosaúde – Instituto de Formação e Inovação em Saúde, Unipessoal, Lda*

☒ **Pesticides**: SGS Portugal (3rd Party laboratory) - *SGS Portugal - Sociedade Geral de Superintendência S.A.*

☐ **Pesticides**: QSI (3rd Party laboratory) - Quality Services International GmbH. Germany

☒ **Residual Solvents:** LEF (3rd Party laboratory) - *Infosaúde – Instituto de Formação e Inovação em Saúde, Unipessoal, Lda.*

☐ **Ochratoxin:** LEF (3rd Party laboratory) - *Infosaúde – Instituto de Formação e Inovação em Saúde, Unipessoal, Lda.*

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Product Name: **Tilray Cannabisextrakt THC5:CBD20**	**Batch Size: 456 Units of 25 mL**	**Revision: 1**
Lot: 24006304	**☒ Expiry Date: 07/2025** **☐ Retest Date:**	
CoA Number: 1024-014		

☐ **Total Ash:** LEF (3rd Party laboratory) - *Infosaúde – Instituto de Formação e Inovação em Saúde, Unipessoal, Lda.*

☒ Approved
☐ Not Approved

Comments and conclusions:
Relative density: 0.9484 (Tested by 3010-TM-QC-000011; Ph.Eur.2.2.5) The product complies with DAB 10 Monograph. All manufacturing stages of this batch of finished product have been carried out full compliance with EU GMP requirements.

REVISION HISTORY

Revision	Revision Date	Reason for Revision
1	02 OCT 24	First version of this document.