

CERTIFICATE OF ANALYSIS

CLIENT DETAILS: E-Burn Limited
DATE STARTED: 25-Jul-22
CERTIFICATE NUMBER: CA22361
STUDY REFERENCE: PN22051

SAMPLE DETAILS

SAMPLE TYPE: Disposable device
SAMPLE DESCRIPTION: Tobacco Blend (Cotton Tank) 18mg/ml
BATCH NUMBER: Not provided
USN: D261

RESULTS (AEROSOL)

Aerosol mass

ANALYTE	TEST METHOD	UNIT	RESULT	STANDARD DEVIATION
E-liquid vaporised mass (EVM) ^N	TM 11.16.1	mg/10 inhalations	13.5	0.557

Carbonyls

ANALYTE	TEST METHOD	UNIT	RESULT	STANDARD DEVIATION
Formaldehyde ^A	TM 11.11.3	ug/10 inhalations	nd	-
Acetaldehyde ^A	TM 11.11.3	ug/10 inhalations	nd	-
Acrolein ^A	TM 11.11.3	ug/10 inhalations	nd	-
Propionaldehyde ^A	TM 11.11.3	ug/10 inhalations	nd	-
Crotonaldehyde ^A	TM 11.11.3	ug/10 inhalations	nd	-
Methyl Ethyl Ketone ^A	TM 11.11.3	ug/10 inhalations	nd	-

Metals

ANALYTE	TEST METHOD	UNIT	RESULT	STANDARD DEVIATION
Aluminium ^N	TM 11.13.1	ug/100 inhalations	nd	-
Chromium ^A	TM 11.13.1	ug/100 inhalations	nd	-
Iron ^N	TM 11.13.1	ug/100 inhalations	nd	-
Nickel ^A	TM 11.13.1	ug/100 inhalations	nd	-
Lead ^A	TM 11.13.1	ug/100 inhalations	nd	-
Tin ^N	TM 11.13.1	ug/100 inhalations	nd	-

Nicotine

ANALYTE	TEST METHOD	UNIT	PUFF BLOCK	RESULT	% OF AVERAGE
Nicotine ^A	TM 11.11.1	mg/10 inhalations	1	0.266	118.4
			2	0.206	91.7
			3	0.202	89.9
			Average	0.225	

^A Accredited to ISO 17025

^N Not accredited to ISO 17025

nd Not detected

REPORTING LIMITS

Compound	Unit	Limit of detection	Limit of quantification
Formaldehyde	ug/10 inhalations	0.454	1.27
Acetaldehyde	ug/10 inhalations	0.932	2.30
Acrolein	ug/10 inhalations	1.09	4.99
Propionaldehyde	ug/10 inhalations	1.85	4.74
Crotonaldehyde	ug/10 inhalations	2.12	9.49
Methyl Ethyl Ketone	ug/10 inhalations	2.43	8.70
Aluminium	ug/100 inhalations	0.13	0.45
Chromium	ug/100 inhalations	0.03	0.07
Iron	ug/100 inhalations	0.05	0.15
Nickel	ug/100 inhalations	0.04	0.12
Lead	ug/100 inhalations	0.08	0.28
Tin	ug/100 inhalations	0.26	0.57

ADDITIONAL INFORMATION

Puffing carried out using the standard puffing regime

- 55ml volume
- 3 second duration
- 30 second inter-inhalation duration

Aerosol generation carried out using Cerulean CET18

TM 11.11.3

Sample aerosol was vaped through an impinger solution of 2,4 DNPH (dinitrophenylhydrazine) where analytes were derivatised. Analysis of standards and samples was carried out using high performance liquid chromatography with UV detection (HPLC-UV Agilent 1260 Infinity II) and the Thermo Scientific Acclaim Carbonyl C18 column 5um x 4.6 x 250mm.

TM 11.13.1

Sample aerosol was vaped through an impinger solution of dilute nitric acid. Analysis of samples was then carried out by ICP-OES (Agilent 5110).

TM 11.11.1

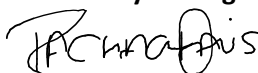
Sample aerosol was captured using a Cambridge filter pad and extracted with aqueous mobile phase. Analysis of standards and samples was carried out using high performance liquid chromatography with UV detection (HPLC UV Agilent 1260 Infinity II) and the Waters XBridge C18 column 3.5um x 4.6 x 150mm.

CONDITIONS OF CERTIFICATE

This Certificate of Analysis relates only to the samples supplied to the laboratory. All samples have been provided by the Client. The results in this certificate should only be reproduced in full. All testing is carried out at the laboratory's permanent facilities.

CERTIFICATE APPROVAL

Laboratory Manager



Rachael Davis

Quality Manager



David Lawson

Date: 04-Aug-22