

# Certificate of Analysis

## 1R6F Certified Reference Cigarette

**Certificate Number: 2023-003-SB-CTRP**

Certification Date: 10/05/2023

Validity: This document is valid until 10/05/2028 unless superseded by a new CoA at an earlier date.

Superseded CoA: **2018-002bCTRP**

Description of CRM	Blended Cigarette, unflavored, 83 mm length
Lot/Batch Number	<b>1R6F</b>
Matrix	Tobacco blend
Major starting materials	Flue-cured, burley and Oriental tobacco types, reconstituted tobacco sheets, expanded flue-cured, expanded burley, glycerin, inverted sugar

### Notes

- The reference values listed below reflect results submitted by three (3) ISO 17025-accredited laboratories using a combination of methods and instrumentation that emulate actual methods and instrumentation techniques currently utilized in the analysis of each parameter in the analytical community.
- The "Reference Uncertainty" listed herein is an expanded uncertainty intended to provide approximately 95% confidence interval around the respective reference values obtained by multiplying the combined standard uncertainty (due to characterization, potential inhomogeneity of the material, and differences in results between participating laboratories) with a coverage factor  $k$ , equal to the t-value based on the approximated degrees of freedom using the Welch-Satterthwaite equation.
- The Reference Values and Uncertainties contained herein are reflective only of data obtained from a Linear Smoking machine.
- The 1R6F Small Batch includes lots 062Y, 063Z, and 063X. A cigarette carton that does not contain any of these 3 lot numbers are excluded from the batch and do not reflect the data for this small batch as declared in this data sheet.

### 1R6F Small Batch Reference Values and Uncertainties

Non-intense (ISO 3308:2012) formerly identified as International Organization for Standardization (ISO) Smoking Regime					
Parameter	Certified Value	Certified Uncertainty ( $U_{CRM}$ )	Coverage Factor of $U_{CRM}$	Unit	Number of accepted data points
Total Particulate Matter (TPM)	9.96	0.60	3.18	mg/cigarette	144
Tar (Nicotine-free dry particulate matter)	8.53	0.38	2.82	mg/cigarette	144
CO (Carbon monoxide)	10.1	0.6	2.59	mg/cigarette	144
Nicotine	0.717	0.113	3.45	mg/cigarette	144
Puff count	7.53	0.49	2.68	Puff/cigarette	144

### Physical Attributes

Total ventilation	33	7	4	%	240
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**INTENDED USE:** This product may be used for analytical method development, assigning values to materials (when applicable), and equipment calibration to any applicable extent.

**INSTRUCTIONS FOR CORRECT USE:** This reference material may be stored at room temperature for a maximum of 10 days prior to conditioning. If this reference material is to be kept for 10 days to 3 months, store in the original packaging or in airtight containers just large enough to contain the sample in a cool dry place (~4°C). If it is to be kept for longer than 3 months, it is recommended that the reference material be stored frozen at, or below, -16 °C until needed. Conditioning of this material should be done following ISO 3402-1:1999. Smoke the reference cigarettes following ISO 3308:2012 "standard" (for the ISO smoking regime) or "Canadian modified" (for the HCl smoking regime). Any cigarettes found to have obvious defects, or which have been damaged during insertion, shall be discarded and replaced with spare, conditioned cigarettes.

**HOMOGENEITY:** Homogeneity of this material is reflected as an uncertainty component of "Certified Uncertainty" as indicated in this Certificate of Analysis.

**Approving Personnel:** This material is approved by Stacey Slone, Ruth McNees, and Ling Yuan.