

ISO 20774:2013-09 (E)

Cigarettes - Determination of carbon monoxide in sidestream smoke - Method using a routine analytical linear smoking machine equipped with a fishtail chimney

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Principle	2
5	Apparatus	2
6	Reagents	5
6.1	Standard gas mixtures	5
7	Sampling and preparation of cigarettes	6
7.1	General	6
7.2	Symbols	6
7.3	Preparation of the cigarettes for smoking	6
7.4	Selection of test portions of cigarettes	6
7.5	Marking the butt length	7
7.6	Conditioning	8
7.7	Preliminary tests before smoking	8
8	Preparation for the smoking run	8
8.1	Smoking plan	8
8.2	Preparation of mainstream and sidestream smoke traps and cigarette holders	8
8.3	Setting up the smoking machine	9
8.4	Assembly of fishtail chimney and sidestream smoke trap	9
9	Procedure for smoking run and collection of sidestream smoke	10
9.1	Preparation of fishtail chimney	10
9.2	Setting the fishtail chimney flow rate	10
9.3	Connection of sidestream smoke filter pad holders	10
9.4	Record the atmospheric conditions	10
9.5	Loading the cigarettes	10
9.6	Smoking the cigarettes	10
10	Determination of carbon monoxide	11
10.1	General principles	11
10.2	Calculation of CO yields using an off-line (bag collection) system	11
10.3	Calculation of carbon monoxide on an on-line (continuous flow) data acquisition system	12
11	Summary of other test sample calculations	13
12	Test report	14
12.1	General	14
12.2	Characteristic data about the cigarette	14
12.3	Data about sampling	15

12.4	Description of test	15
12.5	Test results	15
13	Repeatability and reproducibility	16
Annex A (informative) Smoking plans		17
Annex B (informative) Alternative procedure for CO calibration		21
Bibliography		22