

# ISO 14965:2000-03 (E)

## Air quality - Determination of total non-methane organic compounds - Cryogenic preconcentration and direct flame ionization detection method

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	2
4	Description of the method .....	2
4.1	Sampling .....	2
4.2	Analysis .....	2
5	Interferences .....	3
6	Apparatus .....	3
6.1	Sample collection system (Figure 1) .....	3
6.2	Sample-canister cleaning system (Figure 2) .....	4
6.3	Analytical system (Figure 3) .....	6
7	Reagents and materials .....	9
8	Canister cleanup and preparation .....	9
9	Sampling .....	10
9.1	General .....	10
9.2	Sample collection .....	11
10	Sample analysis .....	12
10.1	Assembly .....	12
10.2	Analytical system leak check .....	12
10.3	Sample volume determination .....	12
10.4	Analytical system dynamic calibration .....	13
10.5	Analysis procedure (see Figure 3) .....	14
11	Performance criteria and Quality Assurance .....	16
11.1	General .....	16
11.2	Standard operating procedure (SOP) .....	17
11.3	Method sensitivity, accuracy and precision .....	17
12	Method modification .....	18
12.1	Sample metering system .....	18
12.2	Canister cleaning .....	18
12.3	FID system .....	18
12.4	Range .....	18
12.5	Alternative cryogenic trapping and heating systems .....	18
12.6	Sub-atmospheric pressure canister sampling .....	18
12.7	Alternative sampling system .....	18
13	Precision and accuracy .....	19

13.1	Precision .....	19
13.2	Accuracy .....	19
	Annex A (informative) Example of pressurized canister Sampling Data Sheet .....	20
	Bibliography .....	21