

DIN EN ISO 23861:2023-02 (E)

Workplae air - Chemical agent present as a mixture of airborne particles and vapour - Requirements for evaluation of measuring procedures using samplers (ISO 23861:2022)

Contents		Page
European foreword		3
Foreword		4
Introduction		5
1	Scope	6
2	Normative references	6
3	Terms and definitions	6
4	Symbols and abbreviated terms	7
5	Sampler types	8
6	Requirements	8
6.1	General	8
6.2	Sampler requirements	8
6.2.1	General	8
6.2.2	Flow resistance and stability of the air flow	8
6.2.3	Connecting parts	8
6.2.4	Pumps	9
6.3	Measuring procedure requirements	9
6.3.1	Sampling procedure requirements	9
6.3.2	Analytical procedure requirements	9
6.3.3	Expanded uncertainty	11
6.3.4	Method description	11
7	General test conditions	11
7.1	Reagents	11
7.2	Apparatus	11
8	Test methods	11
8.1	Spiking method	11
8.1.1	General	11
8.1.2	Deposit of the analyte on the first collection substrate	11
8.1.3	Deposit of the analyte on the other collection substrates of a type A sampler	12
8.1.4	Transfer of the analyte	12
8.2	Evaluation of measuring procedures	13
8.2.1	General	13
8.2.2	Storage after sampling	13
8.3	Uncertainty of the measurement	14
8.3.1	Calculation of the combined standard uncertainty	14
8.3.2	Calculation of the expanded uncertainty	14
9	Test report	14
Annex A (informative) Physical behaviour of a mixture of airborne particles and vapour		15
Annex B (informative) Possible approaches to sample mixtures of airborne particles and vapour ...		19
Annex C (informative) Estimation of uncertainty of measurement		22
Bibliography		25