

ISO 24095:2009-12 (E)

Workplace air - Guidance for the measurement of respirable crystalline silica

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	2
3.1 General definitions	2
3.2 Sampling definitions	3
3.3 Analytical definitions	3
3.4 Statistical terms	4
4 Principle	5
5 Analytical quality requirements	6
6 Administrative controls	6
7 Sampling	8
7.1 General	8
7.2 Sampler	8
7.3 Filters and foams	8
7.4 Sampling pumps	9
7.5 Respirable size selectors	9
7.6 Transportation	9
8 Procedures	9
8.1 Handling of filter cassettes	9
8.2 Method validation	10
8.3 Calibration	10
8.4 Sample preparation	11
8.5 Sample measurement	11
8.6 Instrumental variation	12
9 Internal quality control	13
10 External verification and assessment of uncertainty	13
11 Test report	14
11.1 Minimum report requirements	14
11.2 Data to be archived by the laboratory	14
Annex A (informative) Polymorphs of crystalline silica and their interferences	15
Annex B (informative) The quantification of cristobalite using X-ray diffraction	21
Annex C (informative) Example of quality control charting for respirable crystalline silica	24
Annex D (informative) Estimation of expanded uncertainty for measurements of respirable crystalline silica	25
Bibliography	35