ISO 13320:2009-10 (E)

Particle size analysis - Laser diffraction methods

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms, definitions and symbols 1
3.1 Terms and definitions 1
3.2 Symbols 5

4 Principle 6

5 Laser diffraction instrument 6

6 Operational procedures 10
6.1 Requirements 10
6.2 Sample inspection, preparation, dispersion and concentration 10
6.3 Measurement 12
6.4 Precision 14
6.5 Accuracy 15
6.6 Error sources and diagnosis 17
6.7 Resolution and sensitivity 19

7 Reporting of results 20

Annex A (informative) Theoretical background of laser diffraction 22

Annex B (informative) Recommendations for instrument specifications 39

Annex C (informative) Dispersion liquids for the laser diffraction method 42

Annex D (informative) Refractive index, nm, for various liquids and solids 43

Annex E (informative) Recommendations to reach optimum precision in test methods 48

Bibliography 50