ISO 20804:2022-05 (E)

Determination of the specific surface area of porous and particulate systems by small-angle X- ray scattering (SAXS)

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Symbols 3

5 Principle of the method 4
5.1 General 4
5.2 Ideal two-phase model 5
5.3 Porod law - Specific surface area 7

6 Apparatus 8
6.1 Optics - Focusing - Collimation - Resolution 8
6.2 Additional requirements for the absolute-scale method 10

7 Preliminary procedures and instrument set-up 10

8 Sample preparation 11
8.1 General 11
8.2 Degassing 11

9 Determination of the specific surface area 11
9.1 K/Q (`Invariant') method 11
9.2 Absolute-scale method 13

10 Documentation and test report 15
10.1 Test report 15
10.2 Technical records 16

Annex A (informative) Example of a typical experimental protocol 17

Bibliography 22