

ISO 6344-3:2021-11 (E)

Coated abrasives - Determination and designation of grain size distribution - Part 3: Microgrit sizes P240 to P5000

Contents		Page
Foreword		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Grain size distribution of microgrit sizes P240 to P1200	1
5	Test method of microgrit sizes P240 to P1200	2
5.1	Materials	2
5.1.1	Sedimentation medium	2
5.1.2	Dispersing agent	2
5.1.3	Checking minerals	3
5.2	Apparatus	4
5.3	Preparation	6
5.3.1	Preparation of the apparatus	6
5.3.2	Preparation of the test portion	7
5.4	Procedure	7
5.4.1	Filling of sedimentation tube	7
5.4.2	Dispersion of the test portion	7
5.4.3	Transfer to sedimentation tube	8
5.4.4	Start of measurement	8
5.4.5	Determination of the maximum grain size	8
5.4.6	Recording measurement values	8
5.5	Evaluation	8
5.5.1	General	8
5.5.2	Determination of the grain diameter, d	9
5.5.3	Determination of the volume fraction	10
5.5.4	Representation of the grain size distribution curve	11
5.5.5	Evaluation of the grain size distribution	12
5.5.6	Example of measuring a test portion of fused aluminium oxide	13
5.5.7	Permissible deviations	13
6	Grain size distribution of microgrit sizes P1500 to P5000	13
7	Test method of microgrit sizes P1500 to P5000	14
7.1	Materials	14
7.1.1	Micro-P-Mastergrits	14
7.1.2	Dispersing medium	14
7.2	Apparatus	15
7.3	Preparation	15
7.3.1	Preparation of the test portion	15
7.3.2	Calibration of the Apparatus	15
7.4	Procedure for the determination of the grain size distribution	16
7.5	Evaluation	16
7.5.1	Evaluation of the grain size distribution	16
7.5.2	Permissible deviations	16
8	Test report	17

9	Designation	17
10	Marking	18
Annex A (informative)	Theoretical equivalent grain diameters, d, for grits of fused aluminium oxide and for grits of silicon carbide	19
Annex B (informative)	Template for recording results of a sedimentation analysis of microgrit P sizes using the US sedimentometer	22
Annex C (informative)	Example of recording results of a sedimentation analysis of microgrit P sizes using the US sedimentometer	24