DIN EN 1097-8:2020-06 (E)

Tests for mechanical and physical properties of aggregates - Part 8: Determination of the polished stone value

Contents

Page

European foreword 4

1 Scope 6

2 Normative references 6

3 Terms and definitions 6

4 Principle 7

5 Materials 7
5.1 General 7
5.2 Materials 7

6 Apparatus 8
6.1 General 8
6.2 Accelerated polishing machine 8
6.3 Friction tester 11
6.4 Test sieves 14
6.5 Grid sieve 14
6.6 Length gauge or callipers 14
6.7 Equipment for preparing test specimens 14

7 Preparation of test specimens 15

8 Conditioning of the rubber-tyred wheel 16

9 Accelerated polishing of specimens 16

10 Friction test procedure 18

11 Calculation and expression of results 21

12 Test report 22
12.1 Required data 22
12.2 Optional data 22

Annex A(normative) Determination of aggregate abrasion value (AAV) 23

A.1 General 23
A.2 Principle 23
A.3 Materials 23
A.4 Apparatus 24
A.4.1 General 24
A.4.2 Abrasion machine 24
A.4.3 Test sieves 24
A.4.4 Grid sieve 24
A.4.5 Balance 25
A.4.6 Small fine-haired brushes 25
A.4.7 Brush 25
A.4.8 Clamp 25

A.5 Preparation of test specimens 25
A.5.1 Test portion 25
A.5.2 Specimens 25
A.6 Procedure 25
A.7 Calculation and expression of results 26
A.8 Test report 26

Annex B(normative) Control of materials - Corn emery and emery flour 27

Annex C(normative) Calibration of the accelerated polishing machine 28

C.1 Control of rubber-tyred wheels 28
C.2 Accelerated polishing machine 28
C.3 Rate of flow of corn emery and emery flour 30

Annex D(normative) Calibration of the friction tester and sliders 31

D.1 Friction tester 31
D.1.1 General 31
D.1.2 Mass of pendulum arm and pointer 31
D.1.3 Balancing of the pendulum arm assembly 31
D.1.4 Setting the effective spring tension 31
D.1.5 Setting the pointer stop 31
D.2 Control of sliders and slider rubber 32

Annex E(normative) Friction tester reference stone specimen preparation and friction slider conditioning 33

E.1 General 33
E.2 Preparation and initial testing of friction tester reference stone specimens 33
E.3 Slider conditioning 33

Annex F(informative) Precision for the aggregate abrasion value (AAV) 34

F.1 General 34
F.2 Precision values for repeatability and reproducibility 34

Bibliography 35