

DIN EN 13108-9:2016-12 (E)

Bituminous mixtures - Material specifications - Part 9: Asphalt for Ultra-Thin Layer (AUTL)

| Contents | | Page |
|--|---|-------------|
| European foreword | | 4 |
| Introduction | | 6 |
| 1 | Scope | 7 |
| 2 | Normative references | 7 |
| 3 | Terms, definitions, symbols and abbreviations | 8 |
| 3.1 | Terms and definitions | 8 |
| 3.2 | Symbols and abbreviations | 10 |
| 4 | Requirements for constituent materials | 10 |
| 4.1 | General | 10 |
| 4.2 | Binder | 10 |
| 4.2.1 | General | 10 |
| 4.2.2 | Selection of binder | 11 |
| 4.3 | Aggregates | 11 |
| 4.3.1 | Coarse aggregate | 11 |
| 4.3.2 | Fine aggregate | 11 |
| 4.3.3 | All-in aggregates | 12 |
| 4.3.4 | Added filler | 12 |
| 4.4 | Reclaimed asphalt | 12 |
| 4.5 | Additives | 12 |
| 5 | Requirements for the mixture | 12 |
| 5.1 | General | 12 |
| 5.2 | Composition, grading, binder content | 13 |
| 5.2.1 | Composition | 13 |
| 5.2.2 | Grading | 13 |
| 5.2.3 | Minimum binder content | 15 |
| 5.3 | Properties | 15 |
| 5.3.1 | Specimens | 15 |
| 5.3.2 | Void content | 15 |
| 5.3.3 | Water sensitivity | 17 |
| 5.3.4 | Low temperature properties | 17 |
| 5.3.5 | Friction after polishing | 18 |
| 5.3.6 | Coating and homogeneity | 19 |
| 5.3.7 | Reaction to fire | 19 |
| 5.3.8 | Resistance to fuel for application on airfields | 19 |
| 5.3.9 | Resistance to de-icing fluid for application on airfields | 20 |
| 5.4 | Temperature of the mixture | 20 |
| 5.5 | Regulated dangerous substances | 21 |
| 5.6 | Conflicting requirements | 21 |
| 6 | Assessment and verification of constancy of performance -- AVCP | 22 |
| 7 | Identification | 22 |
| Annex A (normative) Calculations of the penetration or the softening point of the binder of a mixture when reclaimed asphalt is used | | 23 |

| | | |
|--|---|-----------|
| A.1 | General | 23 |
| A.2 | Calculation of the penetration of the binder of a mixture | 23 |
| A.3 | Calculation of the softening point of the binder of a mixture | 23 |
| Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No. 305/2011 | | 25 |
| ZA.1 | Scope and relevant characteristics | 25 |
| ZA.2 | System of Assessment and Verification of Constancy of Performance (AVCP) | 26 |
| ZA.3 | Assignment of AVCP tasks | 27 |
| Bibliography | | 30 |