

ISO 15222:2021-11 (E)

Truck and bus tyres - Method for measuring relative wet grip performance - Loaded new tyres

| Contents | | Page |
|-----------------|--|-------------|
| Foreword | | v |
| 1 | Scope | 1 |
| 2 | Normative references | 1 |
| 3 | Terms and definitions | 1 |
| 4 | Methods for measuring wet grip | 3 |
| 5 | General test conditions | 3 |
| 5.1 | Track characteristics | 3 |
| 5.1.1 | General | 3 |
| 5.1.2 | Standard reference test tyre method | 4 |
| 5.2 | Wetting conditions | 4 |
| 5.3 | Atmospheric conditions | 4 |
| 5.4 | Reference tyre | 4 |
| 6 | Measurement of tyre wet grip on a standard vehicle | 5 |
| 6.1 | Principles | 5 |
| 6.2 | Equipment | 5 |
| 6.2.1 | Vehicle | 5 |
| 6.2.2 | Measuring equipment | 5 |
| 6.3 | Conditioning of the test track | 6 |
| 6.4 | Measurement requirements for test speed | 6 |
| 6.5 | Tyres and rims | 6 |
| 6.5.1 | Vehicle equipment | 6 |
| 6.5.2 | Tyre preparation and break-in | 6 |
| 6.5.3 | Tyre load | 6 |
| 6.5.4 | Tyre inflation pressure | 7 |
| 6.6 | Procedures | 7 |
| 6.7 | Processing of measurement results | 8 |
| 6.7.1 | Calculation of the braking force coefficient | 8 |
| 6.7.2 | Validation of results | 8 |
| 6.7.3 | Calculation of the adjusted braking force coefficients of the reference tyre | 9 |
| 6.7.4 | Calculation of the relative wet grip index of the tyre | 9 |
| 6.8 | Wet grip performance comparison between a candidate tyre and a reference tyre using a control tyre | 10 |
| 6.8.1 | General | 10 |
| 6.8.2 | Principle of the approach | 11 |
| 6.8.3 | Selection of a set of tyres as a control tyre set | 11 |
| 6.8.4 | Storage and preservation of control tyres | 11 |
| 6.8.5 | Replacement of control tyres | 11 |
| 7 | Test method using a trailer or a tyre test vehicle | 11 |
| 7.1 | Principle | 11 |
| 7.2 | Apparatus | 12 |
| 7.3 | Instrumentation | 12 |
| 7.3.1 | General | 12 |
| 7.3.2 | General requirements for measurement system | 13 |
| 7.4 | Selection and preparation of test tyres | 13 |

| | | |
|--|--|----|
| 7.5 | Preparation of the apparatus and the test track | 14 |
| 7.5.1 | Towed trailer | 14 |
| 7.5.2 | Tyre test vehicle | 14 |
| 7.5.3 | Instrumentation and equipment | 14 |
| 7.5.4 | Conditioning of the track | 15 |
| 7.6 | General test conditions | 15 |
| 7.7 | Procedure | 15 |
| 7.8 | Processing of measurement results | 15 |
| 7.8.1 | General | 15 |
| 7.8.2 | Validation of results | 16 |
| 7.8.3 | Calculation of the relative wet grip index of the tyre | 16 |
| Annex A (informative) Example test reports of wet grip index | | 18 |
| Bibliography | | 21 |