

ISO 12219-10:2021 (E)

Interior air of road vehicles — Part 10: Whole vehicle test chamber — Specification and methods for the determination of volatile organic compounds in cabin interiors — Trucks and buses

Contents

| | |
|---------|--|
| | Foreword |
| | Introduction |
| 1 | Scope |
| 2 | Normative references |
| 3 | Terms and definitions |
| 4 | Apparatus and materials |
| 4.1 | General |
| 4.2 | Heating radiator |
| 4.3 | Sampling trains |
| 4.3.1 | Sampling in the test vehicle |
| 4.3.2 | Sampling in the whole vehicle test chamber |
| 4.3.3 | Sampling line |
| 4.4 | Analytical equipment and materials |
| 4.5 | Test vehicle |
| 5 | Principle |
| 6 | Requirements of the whole vehicle test chamber, test vehicle and measurement procedures |
| 6.1 | Requirements for the whole vehicle test chamber |
| 6.2 | Requirements for the test vehicle |
| 6.3 | Requirements for VOC and carbonyl compound air sampling and measurement methods |
| 6.4 | Field blank measurement |
| 7 | Standard test procedure |
| 7.1 | General |
| 7.2 | Pre-arrangements and preconditioning of the whole vehicle test chamber and the vehicle performing field blanks |
| 7.2.1 | Pre-arrangements |
| 7.2.2 | Preconditioning of the whole vehicle test chamber |
| 7.2.3 | Preconditioning of the test vehicle |
| 7.2.4 | Field blanks |
| 7.3 | Detailed description of the test procedure |
| 7.3.1 | Ambient mode |
| 7.3.1.1 | Preconditioning time 0 (see scheme in Figure 3) |
| 7.3.1.2 | Time: 1,00 h |
| 7.3.1.3 | Time 8,50 h |
| 7.3.2 | Parking mode |
| 7.3.2.1 | Time 9,00 h |
| 7.3.2.2 | Time 12,50 h |
| 7.3.3 | Driving mode |
| 7.3.3.1 | Time 13,00 h |
| 7.3.3.2 | Time 13,5 h for trucks, 15 h for buses |
| 8 | Calculation, presentation of results, and precision and uncertainty |
| 9 | Performance characteristics |

10 Quality assurance

Annex A (informative) Whole vehicle test chamber and the ambient mode chamber condition

Annex B (informative) VOC concentration distribution in the bus cabin

Annex C (informative) Temperature measuring points for parking mode

Annex D (informative) Test report

Annex E (informative) Very volatile organic compounds, volatile organic compounds and semi-volatile organic compounds

Page count: 19