

# DIN ISO 12219-9:2019-12 (E)

## Interi or air of road vehicles - Part 9: Determination of the emissions of volatile org anic compounds from vehicle interior parts - Large bag method (ISO 12219-9:2019)

---

<b>Contents</b>	<b>Page</b>
National foreword .....	3
National Annex NA (informative) Bibliography .....	5
Foreword .....	6
Introduction .....	7
<b>1 Scope</b> .....	<b>8</b>
<b>2 Normative references</b> .....	<b>8</b>
<b>3 Terms and definitions</b> .....	<b>8</b>
<b>4 Principle</b> .....	<b>9</b>
<b>5 Apparatus and materials</b> .....	<b>9</b>
5.1 General .....	9
5.2 Large sampling bag .....	10
5.2.1 General .....	10
5.2.2 Material .....	10
5.2.3 Air tightness .....	10
5.2.4 Bag blank concentration .....	10
5.3 Purity of the filling gas .....	10
5.4 Thermostatic oven .....	10
5.5 Pumps .....	11
5.6 Integrating flow meter or gas meter .....	11
<b>6 Test conditions</b> .....	<b>11</b>
6.1 General .....	11
6.2 Vehicle interior parts .....	11
6.3 Storage period and storage conditions .....	11
6.4 Heating temperature .....	12
6.5 Heating time .....	12
6.6 Gas amount to be filled in a sampling bag .....	12
<b>7 Verification of test conditions</b> .....	<b>12</b>
7.1 Monitoring of test conditions .....	12
7.2 Recovery rate .....	12
<b>8 Test method</b> .....	<b>12</b>
8.1 Test equipment .....	12
8.2 Preparation for testing .....	13
8.2.1 Heated cleaning of sampling bag .....	13
8.2.2 Preparation of large sampling bags .....	13
8.3 Emission test .....	13
8.4 Gas sampling .....	14
<b>9 Analysis procedures</b> .....	<b>14</b>
9.1 Analysis of VOC .....	14
9.2 Analysis of formaldehyde and other carbonyl compounds .....	15
<b>10 Calculation of sampling bag values</b> .....	<b>15</b>
<b>11 Test report</b> .....	<b>15</b>
<b>12 Quality assurance/quality control (QA/QC)</b> .....	<b>18</b>
Annex A (informative) Summary for heated cleaning process for large sampling bags .....	19
Annex B (informative) Supplement on test report and recovery rate .....	20
Bibliography .....	22