



TURKISH ACCREDITATION AGENCY

# ACCREDITATION CERTIFICATE

As a Calibration Laboratory

**HAT Sınai ve Tıbbi Gazlar A.Ş. Kalibrasyon Laboratuvarı**

Central Address: KARATEPE MAH. İZMİT CD. NO:120 KARTEPE Kocaeli/Türkiye

is accredited in accordance with TS EN ISO/IEC 17025:2017 standard within the scope given in Annex following the assessment conducted by TURKAK.

**Accreditation Number : AB-0121-K**

**Accreditation Date : 17.02.2014**

**Revision Date / Number : 08.02.2023 / 08**


This certificate shall remain in force until **30.05.2026**, subject to continuing compliance with the standard **TS EN ISO/IEC 17025:2017**, related regulations and requirements.

Gülden Banu Müderrisoğlu  
Secretary General



Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Agreement (MRA) in the scope of ISO/IEC 17025.

*This document has been signed by Gülden Banu Müderrisoğlu on {1} with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.*

 <p>Calibration TS EN ISO/IEC 17025 AB-0121-K</p>	<b>HAT Sınai ve Tıbbi Gazlar A.Ş. Kalibrasyon Laboratuvarı</b>		
	Accreditation Nr: AB-0121-K Revision Nr: 08 Date: 08.02.2023		
<b>Calibration Laboratory</b>			
<b>Address :</b> KARATEPE MAH. İZMİT CD. NO:120 KARTEPE Kocaeli/Türkiye		Phone : +90 262 351 2510 Fax : - Email : info@hatgrup.com Website :	

### Calibration and Measurement Capability (CMC)

#### Chemical Analysis, Reference Materials

Measured Quantity / Calibrated Items	Range	Measurement Conditions	Expanded Measurement Uncertainty (k=2)	Remarks / Calibration Method
Carbon Monoxide(CO) / Nitrogen (N <sub>2</sub> )	100 µmol/mol ≤ C ≤ 1000 µmol/mol	Temperature: (22 ± 4)°C	2,5 %	<ul style="list-style-type: none"> <li>Four-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards.</li> <li>Calibration is performed in the laboratory</li> </ul>
Sulfur dioxide (SO <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	100 µmol/mol ≤ C ≤ 1000 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Four-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards.</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen Monoxide (NO) / Nitrogen (N <sub>2</sub> )	100 µmol/mol ≤ C ≤ 1000 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Four-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards.</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Monoxide(CO) / Nitrogen (N <sub>2</sub> )	10 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018.</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen Monoxide (NO) / Nitrogen (N <sub>2</sub> )	50 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018.</li> <li>Calibration is performed in the laboratory</li> </ul>
Sulfur dioxide (SO <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	100 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018.</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Nitrogen (N <sub>2</sub> ) or air	10 µmol/mol ≤ C <25 µmol mol	Temperature: (22 ± 4)°C	1,5 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018.</li> <li>Calibration is performed in the laboratory</li> </ul>

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Carbon Monoxide(CO) / Nitrogen (N <sub>2</sub> )	50 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen Monoxide (NO) / Nitrogen (N <sub>2</sub> )	25 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Sulfur dioxide (SO <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	25 µmol/mol ≤ C ≤ 5000 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Oxygen (O <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	0,5 cmol/mol ≤ C ≤ 25,0 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Nitrogen (N <sub>2</sub> ) or air	30 µmol/mol ≤ C ≤ 500 µmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Nitrogen (N <sub>2</sub> ) or air	25 µmol/mol ≤ C ≤ 500 µmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018.</li> <li>Calibration is performed in the laboratory</li> </ul>
Sulfur dioxide (SO <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	5 µmol/mol ≤ C < 25 µmol/mol	Temperature: (22 ± 4)°C	3,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards.</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen Monoxide (NO) / Nitrogen (N <sub>2</sub> )	5 µmol/mol ≤ C < 25 µmol/mol	Temperature: (22 ± 4)°C	4,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Monoxide(CO) / Nitrogen (N <sub>2</sub> )	10 µmol/mol ≤ C < 50 µmol/mol	Temperature: (22 ± 4)°C	5,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>

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Methane (CH <sub>4</sub> ) / Nitrogen (N <sub>2</sub> ) or air	50 µmol/mol ≤ C ≤ 3000 µmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018</li> <li>Calibration is performed in the laboratory</li> </ul>
Oxygen (O <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	0,1 cmol/mol ≤ C < 0,5 cmol/mol	Temperature: (22 ± 4)°C	2,5 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon dioxide (CO <sub>2</sub> ) / Nitrogen (N <sub>2</sub> )	0,5 cmol/mol ≤ C ≤ 20 cmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 12963:2017 using dynamic gas mixtures prepared by thermal mass flow controllers according to ISO 6145-7:2018</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Nitrogen (N <sub>2</sub> ) or air	10 µmol/mol ≤ C < 30 µmol/mol	Temperature: (22 ± 4)°C	4,0 %	<ul style="list-style-type: none"> <li>Two-component gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen (N <sub>2</sub> ) / Synthetic Natural Gas Mixture	0,1 cmol/mol ≤ C < 1,0 cmol/mol	Temperature: (22 ± 4)°C	1,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Dioxide (CO <sub>2</sub> ) / Synthetic Natural Gas Mixture	0,05 cmol/mol ≤ C < 0,15 cmol/mol	Temperature: (22 ± 4)°C	1,6 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Methane (CH <sub>4</sub> ) / Synthetic Natural Gas Mixture	77,5 cmol/mol ≤ C < 84,0 cmol/mol	Temperature: (22 ± 4)°C	0,1 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Ethane (C <sub>2</sub> H <sub>6</sub> ) / Synthetic Natural Gas Mixture	0,5 cmol/mol ≤ C ≤ 10,0 cmol/mol	Temperature: (22 ± 4)°C	0,8 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Synthetic Natural Gas Mixture	0,05 cmol/mol ≤ C < 0,2 cmol/mol	Temperature: (22 ± 4)°C	2,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>

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Iso-Butane (i-C <sub>4</sub> H <sub>10</sub> ) / Synthetic Natural Gas Mixture	0,01 cmol/mol ≤ C < 0,03 cmol/mol	Temperature: (22 ± 4)°C	7,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Pentane (n-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,005 cmol/mol ≤ C < 0,01 cmol/mol	Temperature: (22 ± 4)°C	4,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Hexane (n-C <sub>6</sub> H <sub>14</sub> ) / Synthetic Natural Gas Mixture	0,005 cmol/mol ≤ C < 0,01 cmol/mol	Temperature: (22 ± 4)°C	7,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Nitrogen (N <sub>2</sub> ) / Synthetic Natural Gas Mixture	1,0 cmol/mol ≤ C ≤ 7,5 cmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Methane (CH <sub>4</sub> ) / Synthetic Natural Gas Mixture	84,0 cmol/mol ≤ C ≤ 99,0 cmol/mol	Temperature: (22 ± 4)°C	0,07 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Dioxide (CO <sub>2</sub> ) / Synthetic Natural Gas Mixture	0,15 cmol/mol ≤ C < 0,3 cmol/mol	Temperature: (22 ± 4)°C	0,8 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Dioxide (CO <sub>2</sub> ) / Synthetic Natural Gas Mixture	0,3 cmol/mol ≤ C ≤ 2,0 cmol/mol	Temperature: (22 ± 4)°C	0,4 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Synthetic Natural Gas Mixture	0,2 cmol/mol ≤ C < 0,9 cmol/mol	Temperature: (22 ± 4)°C	1,4 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Synthetic Natural Gas Mixture	0,9 cmol/mol ≤ C ≤ 2,0 cmol/mol	Temperature: (22 ± 4)°C	0,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Iso-Butane (i-C <sub>4</sub> H <sub>10</sub> ) / Synthetic Natural Gas Mixture	0,03 cmol/mol ≤ C < 0,05 cmol/mol	Temperature: (22 ± 4)°C	2,3 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>

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Iso-Butane (i-C <sub>4</sub> H <sub>10</sub> ) / Synthetic Natural Gas Mixture	0,05 cmol/mol ≤ C ≤ 0,5 cmol/mol	Temperature: (22 ± 4)°C	1,4 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Iso-Pentane (i-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,01 cmol/mol ≤ C < 0,03 cmol/mol	Temperature: (22 ± 4)°C	3,7 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Iso-Pentane (i-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,03 cmol/mol ≤ C <0,05 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Iso-Pentane (i-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,05 cmol/mol ≤ C ≤ 0,12 cmol/mol	Temperature: (22 ± 4)°C	1,2 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Pentane (n-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,01 cmol/mol ≤ C < 0,03 cmol/mol	Temperature: (22 ± 4)°C	3,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Pentane (n-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,03 cmol/mol ≤ C < 0,05 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Pentane (n-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,05 cmol/mol ≤ C ≤ 0,12 cmol/mol	Temperature: (22 ± 4)°C	1,3 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Butane (n-C <sub>4</sub> H <sub>10</sub> ) / In Synthetic Natural Gas Mixture	0,01 cmol/mol ≤ C< 0,03 cmol/mol	Temperature: (22 ± 4)°C	6,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Butane (n-C <sub>4</sub> H <sub>10</sub> ) / In Synthetic Natural Gas Mixture	0,03 cmol/mol ≤ C < 0,1 cmol/mol	Temperature: (22 ± 4)°C	3,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Butane (n-C <sub>4</sub> H <sub>10</sub> ) / In Synthetic Natural Gas Mixture	0,1 cmol/mol ≤ C ≤ 0,5 cmol/mol	Temperature: (22 ± 4)°C	1,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>

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Iso-Pentane (i-C <sub>5</sub> H <sub>12</sub> ) / Synthetic Natural Gas Mixture	0,005 cmol/mol ≤ C < 0,01 cmol/mol	Temperature: (22 ± 4)°C	4,5 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Hexane (n-C <sub>6</sub> H <sub>14</sub> ) / Synthetic Natural Gas Mixture	0,01 cmol/mol ≤ C < 0,02 cmol/mol	Temperature: (22 ± 4)°C	5,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
n-Hexane (n-C <sub>6</sub> H <sub>14</sub> ) / Synthetic Natural Gas Mixture	0,02 cmol/mol ≤ C ≤ 0,12 cmol/mol	Temperature: (22 ± 4)°C	3,0 %	<ul style="list-style-type: none"> <li>Synthetic Natural Gas mixture</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Monoxide (CO) / Exhaust Emission Gas Mixture	0,5 cmol/mol ≤ C ≤ 10,0 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Exhaust emission gas mixture</li> <li>The balance gas in the mixture is Nitrogen (N<sub>2</sub>).</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Carbon Dioxide (CO <sub>2</sub> ) / Exhaust Emission Gas Mixture	5,0 cmol/mol ≤ C ≤ 15,0 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Exhaust emission gas mixture</li> <li>The balance gas in the mixture is Nitrogen (N<sub>2</sub>).</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Propane (C <sub>3</sub> H <sub>8</sub> ) / Exhaust Emission Gas Mixture	0,01 cmol/mol ≤ C ≤ 1,0 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Exhaust emission gas mixture</li> <li>The balance gas in the mixture is Nitrogen (N<sub>2</sub>).</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>
Oxygen (O <sub>2</sub> ) / Exhaust Emission Gas Mixture	0,05 cmol/mol ≤ C ≤ 21,0 cmol/mol	Temperature: (22 ± 4)°C	2,0 %	<ul style="list-style-type: none"> <li>Exhaust emission gas mixture</li> <li>The balance gas in the mixture is Nitrogen (N<sub>2</sub>).</li> <li>The gas mixtures are certified according to ISO 6143:2001 using internationally traceable reference gas standards</li> <li>Calibration is performed in the laboratory</li> </ul>

This document has been signed by Gülden Banu Müderrisoğlu on {1} with a secure electronic signature in accordance with the electronic signature law numbered 5070. Use the QR code to verify the e-signed document.