Thermo Scientific Gas Chromatography Analyzers
Determination of hydrocarbons in LPG and propane/propene gases by ASTM D2163

The Thermo Scientific TRACE 1310 GC analyzer for ASTM D2163 performs a quantitative determination of individual hydrocarbons, C2-C5, in liquefied petroleum (LP) gases and mixtures of propane.

**Instrument configuration**
- TRACE 1310 GC
- Flame Ionization Detector (FID)
- Auxiliary Valve oven
- Front bulkhead connection
- Separate gas and LPG injection valves with independent bulkhead connections

**Representative chromatogram**

Figure 1. Butane (C4 LPG) Alumina Plot Column showing excellent separation of C1-C5 including base line separation of cyclopropane/propylene
LPG and propane/propylene mixtures

Technical and performance specifications

<table>
<thead>
<tr>
<th>Part numbers</th>
<th>LHA216300011 /LHA216300011-230</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methods</td>
<td>ASTM D2163</td>
</tr>
<tr>
<td>Sample type</td>
<td>Gas or LPG</td>
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<tr>
<td>Channel 1</td>
<td>FID</td>
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<tr>
<td>Detection</td>
<td>Hydrocarbons – methane, ethane, propane, propene, acetylene, iso-butane, propadiene, butane, trans-2-butene, butene-1, isobutene, cis-2-butene, methyl acetylene and 1,3-butadiene</td>
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<tr>
<td>Typical detection limit</td>
<td>0.1 ppm</td>
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<tr>
<td>Working range</td>
<td>0.01% to 100% (v/v)</td>
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Key features

• Fully assembled and tested
• Inject gas or LPG samples
• Separate and independent column and valve oven
• Complete technical documentation package

Options

• Chromeleon Chromatography Data System

Find out more at thermofisher.com/petro