Flame Ionization Detector Mixtures

Matheson FID fuels are available in two grades to meet your specific application. Our Ultra Grade is suitable for applications requiring low hydrocarbon impurity concentrations such as emissions monitoring.

For information regarding FID carrier gases please refer to page 1 Gas Mixtures – Gas Chromatography Calibration Standards, and Carrier Gases.

### Shipping Information
- **UN Number:** UN 1954
- **DOT Proper Shipping Name:** Compressed Gas, nos (List of Components)
- **DOT Classification:** 2.1 (Flammable Gas)
- **DOT Label:** FLAMMABLE GAS
- **TC Shipping Name:** Compressed Gas, nos (List of Components)
- **TC Classification:** 2.1
- **TC Label:** FLAMMABLE GAS

### Cylinder Specifications

<table>
<thead>
<tr>
<th>Cylinder Size</th>
<th>Valve Outlet CGA No.</th>
<th>Pressure psig @ 70°F</th>
<th>Pressure kPa @ 21.1°C</th>
<th>Approximate Ship Weight lb</th>
<th>kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1L</td>
<td>350</td>
<td>2,400</td>
<td>16,547</td>
<td>186</td>
<td>84</td>
</tr>
<tr>
<td>1A</td>
<td>350</td>
<td>2,000</td>
<td>13,790</td>
<td>153</td>
<td>69</td>
</tr>
<tr>
<td>2</td>
<td>350</td>
<td>2,000</td>
<td>13,790</td>
<td>83</td>
<td>38</td>
</tr>
<tr>
<td>3</td>
<td>350</td>
<td>2,000</td>
<td>13,790</td>
<td>37</td>
<td>17</td>
</tr>
</tbody>
</table>

### Gas Mixture Specifications

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Cylinder Size</th>
<th>Content US</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>G0864212</td>
<td>1L</td>
<td>269 ft³</td>
<td>7.62 m³</td>
</tr>
<tr>
<td>G0864201</td>
<td>1A</td>
<td>202 ft³</td>
<td>5.72 m³</td>
</tr>
<tr>
<td>G0864240</td>
<td>2</td>
<td>79 ft³</td>
<td>2.24 m³</td>
</tr>
<tr>
<td>G2658476</td>
<td>3</td>
<td>34 ft³</td>
<td>0.96 m³</td>
</tr>
</tbody>
</table>

**FID Fuel, Ultra Grade**
- **40% Hydrogen**
- **60% Helium**

Guaranteed Specifications:
- Hydrogen: 39-41%
- THC as Methane: ≤ 0.1 ppm
- Water: ≤ 1 ppm

**FID Fuel, Zero Grade**
- **40% Hydrogen**
- **60% Helium**

Guaranteed Specifications:
- Hydrogen: 38-42%
- THC as Methane: ≤ 0.5 ppm

**FID Fuel, Ultra Grade**
- **40% Hydrogen**
- **60% Nitrogen**

Guaranteed Specifications:
- Hydrogen: 39-41%
- THC as Methane: ≤ 0.1 ppm
- Water: ≤ 1 ppm

**FID Fuel, Zero Grade**
- **40% Hydrogen**
- **60% Nitrogen**

Guaranteed Specifications:
- Hydrogen: 38-42%
- THC as Methane: ≤ 0.5 ppm