Accurately measuring feedstock impurities at increasingly lower concentrations is critical to process efficiency and profitability. For example, producers of high-purity monomers face stiff competition and tight purity specifications. Research and production operations in the food, pharmaceutical, chemical, and semi-conductor industries require high-purity gases as well.

Failure to characterize impurities in feedstock streams can render the gas unfit for a given application. Trace contaminants can also contribute to equipment corrosion and reduced polymer yields. Worst of all, they can cause catalyst degradation, poisoning, and contamination — leading to costly downtime and catalyst bed replacement.

**Confidently detect trace contaminants in process feedstocks and finished products immediately after installation**

Based on Agilent 7890B GC system, **Permanent Gas and Trace Impurity Analyzers** are factory-configured and chemically tested to measure permanent gases in refinery and natural gas streams. They can also detect sub-ppm-level contaminants in high-purity gases, monomers, and other light hydrocarbon streams.

**Agilent Permanent Gas and Trace Impurity Analyzers** include innovative technology and reflect our stringent quality control process. Systems include:

**Factory**
- System setup and leak testing
- Instrument checkout
- Installation of appropriate columns
- Factory-run checkout method using application checkout mix

**Delivery**
- Instrument manual for running the method
- CD-ROM with method parameters and checkout data files for easy out-of-the-box operation
- Application related consumables included — no separate ordering required
- Easy consumables re-ordering information

**Installation**
- Duplicate factory checkout with checkout sample — onsite by factory-trained support engineer
- Optional application startup assistance
Perform fast, unattended analysis and produce stable results using these built-in features:

- **Pre-configuration and chemical testing** ensure optimal performance for ppm-to-% level analysis in high-purity gas streams.

- **Multi-column, multi-detector configurations** maximize the data obtained from a single analysis.

- **Capillary Flow Technology (CFT)** reduces analysis time, improves data, and minimizes the need for system maintenance.

- **Onsite installation and performance checkout** confirm that your analyzer and application meet rigorous Agilent performance criteria.

- **System familiarization** enables your team to begin calibration and validation immediately following installation.

**Ordering information:**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Analyzer Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1 7890-0538</td>
<td>Permanent Gas Analyzer, Single Channel</td>
</tr>
<tr>
<td>SP1 7890-0573</td>
<td>Permanent Gas/Hydrogen Analyzer</td>
</tr>
<tr>
<td>G3445 Series #646</td>
<td>Low CO and CO₂ in Process Gases Containing High CH₄ Analyzer</td>
</tr>
<tr>
<td>G3445 Series #647</td>
<td>Low CO and CO₂ in Process Gas Analyzer</td>
</tr>
<tr>
<td>SP1 7890-0191</td>
<td>Inert Impurities in Pure Chlorine Analyzer</td>
</tr>
<tr>
<td>SP1 7890-0219</td>
<td>Trace Impurities in Helium Analyzer by PDHID</td>
</tr>
<tr>
<td>SP1 7890-0237</td>
<td>Impurities in Monomers Analyzer by PDHID</td>
</tr>
<tr>
<td>SP1 7890-0305</td>
<td>Inert Impurities in Crude Chlorine Analyzer</td>
</tr>
<tr>
<td>SP1 7890-0341</td>
<td>Trace Oxygenates and Hydrocarbons in Ethylene Analyzer</td>
</tr>
<tr>
<td>SP1 7890-0366</td>
<td>Trace CO and CO₂ in Hydrogen and Light Gaseous Hydrocarbons Analyzer</td>
</tr>
<tr>
<td>SP1 7890-0409</td>
<td>Impurities in Ethylene/Propylene Analyzer by PDHID</td>
</tr>
</tbody>
</table>

**Put your applications on the fast track**

Contact your local Agilent Representative or Agilent Authorized Distributor at **agilent.com/chem/contactus**

Or call **800-227-9770** (in the U.S. or Canada)

Visit **agilent.com/chem/appkits** for a description of available Analyzers and Application Kits

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Printed in U.S.A., September 25, 2014
5991-5042EN