Carbon, Nitrogen, Hydrogen and Sulfur in fuels

Instrument: ECS 8020
Mode: CHNS
Pretreatments: none
Carbon, Nitrogen, Hydrogen and Sulfur determination in fuels are required to determine the quality, composition and energetic characteristics of studied product. In particular, different standard methods are available nowadays. One of the most applied is the ASTM-D5291. ECS8020 can be used for this method, letting the user obtain satisfactory data.

The simultaneous determination lets the user to obtain reliable data. The need to obtain these data is justified by the need of industries and laboratories to characterize the petrochemical products. The CHN determination is important for petroleum productive chain and for the energetic estimations and performances. Hydrogen:Carbon ratio is relevant for upgrading processes and fuels enhancement. Sulfur detection is more linked to technical, chemical and environmental matters.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Carbon</th>
<th>Nitrogen</th>
<th>Hydrogen</th>
<th>Sulfur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>80.9</td>
<td>0.49</td>
<td>10.1</td>
<td>1.91</td>
</tr>
<tr>
<td>Standard deviation</td>
<td>0.30</td>
<td>0.02</td>
<td>0.10</td>
<td>0.06</td>
</tr>
<tr>
<td>Average accuracy</td>
<td>0.37</td>
<td>4.08</td>
<td>0.99</td>
<td>3.14</td>
</tr>
</tbody>
</table>

All reported values unit: %

- Configuration: CHNS
- Furnaces: no. 2
- Sampler: Pneumatic
- Chemical standard: BBOT and Sulfanilamide

To send your samples for free demonstration analyses: info@nctechnologies.it

For analytical and technical questions: customerservice@nctechnologies.it