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Lampiran 1

Analisa Kandungan Sulfur dalam Kerosin.

Tabel VI.1. Data Analisa Sulfur.

<table>
<thead>
<tr>
<th>No Sampel</th>
<th>No Uji</th>
<th>Berat (gr)</th>
<th>Titran (ml)</th>
</tr>
</thead>
<tbody>
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<td></td>
<td>awal</td>
<td>akhir</td>
<td>( W )</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>( A )</td>
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<td>41,8794</td>
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<tr>
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<td>2</td>
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<td>36,2011</td>
<td>33,9732</td>
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<td>2</td>
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<td>40,1929</td>
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<td>35,1966</td>
</tr>
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<td>E</td>
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<td>33,9482</td>
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<td>51,7895</td>
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<td>43,9509</td>
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<td>46,4646</td>
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<td>43,2294</td>
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<td>46,4925</td>
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<td>J</td>
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<td>46,5324</td>
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<td>K</td>
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<tr>
<td></td>
<td>2</td>
<td>43,6255</td>
<td>40,4050</td>
</tr>
</tbody>
</table>
Rumus yang digunakan

% Berat Sulfur dalam Sampel = \( \frac{16.03 \times N \times A}{10 \times W} \)

Keterangan:
A : Volume Titran (ml)
N : Normalitas NaOH (0,05 N)
W : Berat Sampel terbakar (gr)
: berat awal - berat akhir

Contoh perhitungan untuk No Sampel A, No uji 1:

% berat Sulfur dalam sampel = \( \frac{16.03 \times 0.05 \times 0.87}{27.476} \)
= 0.025

Tabel VI.2. Perhitungan Analisa Sulfur.

<table>
<thead>
<tr>
<th>Kode Sampel</th>
<th>Hasil Analisa Sulfur (%) berat</th>
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<th></th>
</tr>
</thead>
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<tr>
<td></td>
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<td>No Uji 2</td>
<td>Rata-rata</td>
</tr>
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<td>0.031</td>
<td>0.032</td>
<td>0.031</td>
</tr>
<tr>
<td>A</td>
<td>0.025</td>
<td>0.028</td>
<td>0.0265</td>
</tr>
<tr>
<td>B</td>
<td>0.026</td>
<td>0.026</td>
<td>0.026</td>
</tr>
<tr>
<td>C</td>
<td>0.023</td>
<td>0.024</td>
<td>0.0235</td>
</tr>
<tr>
<td>D</td>
<td>0.022</td>
<td>0.024</td>
<td>0.023</td>
</tr>
<tr>
<td>E</td>
<td>0.022</td>
<td>0.024</td>
<td>0.023</td>
</tr>
<tr>
<td>F</td>
<td>0.024</td>
<td>0.023</td>
<td>0.0235</td>
</tr>
<tr>
<td>G</td>
<td>0.030</td>
<td>0.023</td>
<td>0.0295</td>
</tr>
<tr>
<td>H</td>
<td>0.022</td>
<td>0.024</td>
<td>0.023</td>
</tr>
<tr>
<td>I</td>
<td>0.023</td>
<td>0.023</td>
<td>0.023</td>
</tr>
<tr>
<td>J</td>
<td>0.023</td>
<td>0.019</td>
<td>0.021</td>
</tr>
<tr>
<td>K</td>
<td>0.021</td>
<td>0.022</td>
<td>0.0215</td>
</tr>
</tbody>
</table>
lampiran 2

Analisa Bilangan Iod pada Karbon Aktif.

- Standardisasi Na₂S₂O₃ dengan K₂Cr₂O₇

Rumus yang digunakan:

\[
\text{Normalitas Na}_2\text{S}_2\text{O}_3 = \frac{25 \times 0,1 \times 10}{V \times 161}
\]

Tabel VI.3. Data Titrasi Standardisasi Na₂S₂O₃

<table>
<thead>
<tr>
<th>Titrasi</th>
<th>ml Titran</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,6</td>
</tr>
<tr>
<td>2</td>
<td>1,4</td>
</tr>
<tr>
<td>3</td>
<td>1,6</td>
</tr>
<tr>
<td>rata-rata</td>
<td>1,53</td>
</tr>
</tbody>
</table>

\[
\text{Normalitas Na}_2\text{S}_2\text{O}_3 = \frac{25 \times 0,1 \times 10}{1,53 \times 161}
\]

\[= 0,101 \text{ N}\]

Tabel VI.4. Data Titrasi Analisa Bilangan Iod.

<table>
<thead>
<tr>
<th>Kode Sampel</th>
<th>ml Titran 1</th>
<th>ml Titran 2</th>
<th>ml Titran 3</th>
<th>rata-rata</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8,5</td>
<td>8,4</td>
<td>8,3</td>
<td>8,4</td>
</tr>
<tr>
<td>B</td>
<td>7,2</td>
<td>7,5</td>
<td>7,5</td>
<td>7,4</td>
</tr>
<tr>
<td>C</td>
<td>7,4</td>
<td>7,4</td>
<td>7,2</td>
<td>7,2</td>
</tr>
<tr>
<td>D</td>
<td>6,7</td>
<td>6,8</td>
<td>6,9</td>
<td>6,8</td>
</tr>
<tr>
<td>E</td>
<td>6,9</td>
<td>6,8</td>
<td>7,0</td>
<td>6,9</td>
</tr>
<tr>
<td>F</td>
<td>8,1</td>
<td>8,2</td>
<td>8,0</td>
<td>8,0</td>
</tr>
<tr>
<td>G</td>
<td>7,2</td>
<td>7,2</td>
<td>7,2</td>
<td>7,2</td>
</tr>
<tr>
<td>H</td>
<td>7,3</td>
<td>7,2</td>
<td>7,1</td>
<td>7,2</td>
</tr>
<tr>
<td>I</td>
<td>7,1</td>
<td>7,0</td>
<td>7,2</td>
<td>7,1</td>
</tr>
<tr>
<td>J</td>
<td>7,3</td>
<td>7,0</td>
<td>7,0</td>
<td>7,1</td>
</tr>
</tbody>
</table>
- Perhitungan Bilangan Iod

Rumus yang digunakan:

\[
\text{Bilangan Iod} = \frac{V \times N \times 126.9 \times 50}{0.5 \times 10}
\]

Keterangan:

\( V \) : ml Titran
\( N \) : Normalitas \( Na_2S_2O_3 \) : 0,101

Contoh perhitungan Bilangan Iod Kode Sampel A:

\[
\text{Bilangan Iod} = \frac{7.4 \times 0.101 \times 126.9 \times 50}{0.5 \times 10}
= \frac{4742.253}{5}
= 948
\]

Tabel VI.5. Perhitungan Analisa Bilangan Iod.

<table>
<thead>
<tr>
<th>Kode Sampel</th>
<th>ml Titran</th>
<th>Bilangan Iod</th>
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</thead>
<tbody>
<tr>
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<td>8,4</td>
<td>1077</td>
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<tr>
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<td>948</td>
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<tr>
<td>B</td>
<td>7,4</td>
<td>948</td>
</tr>
<tr>
<td>C</td>
<td>7,2</td>
<td>923</td>
</tr>
<tr>
<td>D</td>
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<td>872</td>
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<td>872</td>
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<td>923</td>
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<tr>
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<td>7,2</td>
<td>923</td>
</tr>
<tr>
<td>J</td>
<td>7,1</td>
<td>909</td>
</tr>
<tr>
<td>K</td>
<td>7,1</td>
<td>909</td>
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</tbody>
</table>
Lampiran 3
Tabel VI.6. Analisa warna Saybolt.

<table>
<thead>
<tr>
<th>No Warna Standard</th>
<th>Kedalaman Sampel (Inch)</th>
<th>Nomor Warna Saybolt</th>
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<td>1/2</td>
<td>20,00</td>
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</tr>
<tr>
<td>1/2</td>
<td>18,00</td>
<td>+29</td>
</tr>
<tr>
<td>1/2</td>
<td>16,00</td>
<td>+28</td>
</tr>
<tr>
<td>1/2</td>
<td>14,00</td>
<td>+27</td>
</tr>
<tr>
<td>1/2</td>
<td>12,00</td>
<td>+26</td>
</tr>
<tr>
<td>1</td>
<td>20,00</td>
<td>+25</td>
</tr>
<tr>
<td>1</td>
<td>18,00</td>
<td>+24</td>
</tr>
<tr>
<td>1</td>
<td>16,00</td>
<td>+23</td>
</tr>
<tr>
<td>1</td>
<td>14,00</td>
<td>+22</td>
</tr>
<tr>
<td>1</td>
<td>12,00</td>
<td>+21</td>
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<tr>
<td>1</td>
<td>10,75</td>
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<td>1</td>
<td>9,50</td>
<td>+19</td>
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<td>8,25</td>
<td>+18</td>
</tr>
<tr>
<td>1</td>
<td>7,25</td>
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<tr>
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<td>6,25</td>
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<td>2,625</td>
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<tr>
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</table>
Lampiran 4
Spektra Infra Merah.

Gambar VI. 1. Spektra Infra Merah Kerosin.
Gambar VI.2. Spektra Infra Merah Karbon Aktif murni.
Gambar VI.3. Spektra Infra Merah Karbon Aktif yang Telah Digunakan untuk Mengadsorpsi
Lampiran 5
Gambar Alat yang Digunakan

Gambar VI.4. Rangkaian Pembakar dari Alat Lamp Met...
Gambar VI.5. Unit Sulfur Lamp Method
Gambar VI.6. Alat Saybolt Chromometer