Amodrill® Olefin Drilling Fluids

Ineos Oligomers offers a range of products to the oilfield drilling arena. These include linear alpha olefins, internal olefins, olefin blends, and polyalphaolefins. The following table identifies the products and their typical properties within each of these categories.

Ineos alpha olefins are clear, colorless, water-white, mobile liquids, which are 99+% olefinic. Shipping is by barge, tank truck, tank car, drum, or portable tank.

Individual data sheets are available on each of these materials.

<table>
<thead>
<tr>
<th>Product</th>
<th>Density @ 15.6°</th>
<th>Kinematic Viscosity 40°C</th>
<th>Kinematic Viscosity 100°C</th>
<th>Pour Point °C</th>
<th>Flash Point °C</th>
<th>Recommended Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amodrill®1000</td>
<td>0.790</td>
<td>3.01</td>
<td>1.27</td>
<td>-12</td>
<td>137</td>
<td>Gulf of Mexico (GOM) Compliant drilling fluid for offshore drilling, the standard for US waters</td>
</tr>
<tr>
<td>Amodrill®2162</td>
<td>0.795</td>
<td>3.30</td>
<td>1.34</td>
<td>-18</td>
<td>128</td>
<td>Gulf of Mexico (GOM) Compliant drilling fluid for offshore drilling, the standard for US waters</td>
</tr>
<tr>
<td>Amodrill®1100</td>
<td>0.779</td>
<td>2.09</td>
<td>0.97</td>
<td>-12</td>
<td>114</td>
<td>Oilfield drilling fluids, favored in European waters or zero discharge operations.</td>
</tr>
<tr>
<td>Amodrill®1200</td>
<td>0.782</td>
<td>2.25</td>
<td>1.03</td>
<td>-9</td>
<td>124</td>
<td>Oilfield drilling fluids, used in offshore applications.</td>
</tr>
<tr>
<td>Amodrill®1230</td>
<td>0.781</td>
<td>2.14</td>
<td>0.99</td>
<td>-12</td>
<td>121</td>
<td>Oilfield drilling fluids, used in offshore applications.</td>
</tr>
<tr>
<td>Amodrill®1410</td>
<td>0.775</td>
<td>1.87</td>
<td>0.87</td>
<td>-18</td>
<td>116</td>
<td>Lower viscosity drilling fluids; ideal for land farming of cuttings</td>
</tr>
<tr>
<td>Amodrill®1500</td>
<td>0.762</td>
<td>1.46</td>
<td>0.74</td>
<td>-30</td>
<td>91</td>
<td>Lower pour point and viscosity fluid ideal for offshore and land drilling.</td>
</tr>
<tr>
<td>Amodrill®2110</td>
<td>0.797</td>
<td>5.5</td>
<td>1.8</td>
<td>&lt; -65</td>
<td>155</td>
<td>Additive used to improve lubricity and wellbore stability. A PAO type material</td>
</tr>
</tbody>
</table>

1Typical properties will vary within specification limits.
Regulatory Information
The product and uses described herein may require global product registrations and notifications for chemical inventory listings, or for use in food contact or medical devices. For further information, send an e-mail to: oligomersmsds@ineos.com.

Health and Safety Information
The product described herein may require precautions in handling and use because of toxicity, flammability, or other consideration. The available product health and safety information for this material is contained in the Material Safety Data Sheet (MSDS) that may be obtained by calling +1-866-363-2454 (Toll Free-North America), or by sending an e-mail to: oligomersmsds@ineos.com. Before using any material, a customer is advised to consult the MSDS for the product under consideration for use.

The Material Safety Data Sheet for this product contains shipping descriptions and should be consulted, before transportation, as a reference in determining the proper shipping description. If the material shipped by Ineos Oligomers is altered or modified, different shipping descriptions may apply and the MSDS of the original material should not be used.

For additional information, samples, pricing and availability, please contact:

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