



## HDL Plus Motor Oils

### Typical Specifications

Engine Armour HDL Plus Motor Oils have been improved and upgraded to be among the best and most efficient diesel engine oils available in the fleet market today. New additive systems and rigorous laboratory and field testing have proven that these new Motor Oils are up to the task of protecting your engine; helping your engine operate within the new emission and pollution requirements as well as meeting or exceeding the OEM requirements for almost every new engine being built by every engine manufacturer worldwide.

The new high performance Engine Armour HDL Plus Motor Oils are specifically engineered to meet the manufacturers' prerequisite for performance, TBN, and balanced low ash requirements. They will deliver superior long lasting protection for both turbocharged and naturally aspirated diesel and gasoline engines, including those engines that have exhaust gas recirculation (EGR) systems. They are formulated for extended service/extended drain when operated under typical operating conditions and are engineered to help promote fuel economy.

Applications: (API (CI-4, CH-4, CG-4, CF-4 Multi-Grades only)), CF-2[1] CF/CD, SL/SJ/SH [2]), (Allison C-4), (Mil-PRF-2104G(AA52306), (Mil-L-2104-B), (Mil-L-46152), (Caterpillar TO-2, ECF-1, SEBU 6250), (Mack EO-N Premium Plus, EO-M, EO-M Plus), (Cummins CES 20078, 76, 71, CES 20077, 72), (JASO DH-1), (Detroit Diesel 7SE270 [3]), (Daimler Chrysler DC[MB] 228.3, 228.2), (ACEA A5/B5, A3/B4, A3/B3, A1/B1, E7, 6, 5, 4, 3, 2, 1), (Volvo VD-2, VD-3), (Man 270/271), (MTU Type I)

<b>SAE Grade</b>	<b>10w30</b>	<b>15w40</b>	<b>20w50</b>	<b>10</b>	<b>30</b>	<b>40</b>	<b>50</b>
<b>API Gravity</b>	<b>29.5</b>	<b>28.5</b>	<b>27.0</b>	<b>129.5</b>	<b>28.5</b>	<b>28.0</b>	<b>27.5</b>
<b>Viscosity cSt</b>							
<b>@ 40 C</b>	<b>68.4</b>	<b>101.0</b>	<b>158.0</b>	<b>37.0</b>	<b>88.0</b>	<b>133.0</b>	<b>192.0</b>
<b>@ 100 C</b>	<b>10.40</b>	<b>15.0</b>	<b>17.50</b>	<b>6.60</b>	<b>11.20</b>	<b>14.50</b>	<b>18.50</b>
<b>Vis Index</b>	<b>140</b>	<b>155</b>	<b>122</b>	<b>140</b>	<b>105</b>	<b>104</b>	<b>103</b>
<b>Flash Point C</b>	<b>205</b>	<b>210</b>	<b>220</b>	<b>190</b>	<b>220</b>	<b>230</b>	<b>240</b>
<b>Pour Point C</b>	<b>-36</b>	<b>-30</b>	<b>-24</b>	<b>-33</b>	<b>-21</b>	<b>-18</b>	<b>-12</b>
<b>TBN (D-2896)</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>10</b>

The data presented in this specification sheet are believed to be accurate; however, Engine Armour shall not be liable for its content and makes no warranty with respect thereto.