



## **DURALIFE® SYNTHETIC BLEND EXTREME PRESSURE HEAVY DUTY INDUSTRIAL GEAR OILS**

**DURALIFE® SYNTHETIC BLEND EXTREME PRESSURE HEAVY DUTY INDUSTRIAL GEAR OILS** are formulated with a selected blend of PAO synthetic and high quality mineral base oils with Sulfur-phosphorus Extreme pressure additives to give minimum gear wear, maximum load carrying capacity, corrosion protection, and outstanding resistance to high temperature sludging.

### **APPLICATIONS :**

**DURALIFE® SYNTHETIC BLEND EXTREME PRESSURE HEAVY DUTY INDUSTRIAL GEAR OILS** are recommended for all types of industrial and mobile equipment requiring EP gear oils such as the enclosed gear drives and speed reducers, ranging from small gearboxes to large , high-power units on metal rolling mills, cement mills , sugar mills, steel mills, quarries, metal process plants, conveyors and mine hoists ,agitators, extruders, pressers ,etc., and for a wide of marine applications include marine gearing including main propulsion, centrifuges, deck machinery such as winches, windlasses, cranes, turning gears, pumps, elevators and rudder carries. They are also suitable for chain cases, sprockets, slide guides, flexible couplings, and plain and rolling element bearings operating under severe or shock load conditions.

They are compatible with non-EP copper and its alloys and hence suitable for gearboxes and drives incorporating bronze components, such as worm wheels.

Meet the requirements of:

DIN 51517 Part 3

AGMA 9005 - D94 EP, 9005 – E 02EP

ISO 12925-1 Type CKC/ CKD

US Steel 224

David Brown Type E

Hansen Transmissions

Cincinnati Milacron

Müller Weingarten equipment

### **BENEFITS :**

- Superior antirust , anti-wear and EP properties.
- Extend gear life due to high load carrying and outstanding ability to keep gear surfaces free of deposits.
- Excellent thermal and oxidation stability.
- Non corrosive steel, cast iron , copper ,and bronze.
- Superior demulsibility as it separate from water easily.

### **TYPICAL CHARACTERISTICS :**

| <b>Test</b>  | <b>Method</b>              | <b>SBEP 68</b> | <b>SBEP 100</b> | <b>SBEP 150</b> | <b>SBEP 220</b> | <b>SBEP 320</b> |
|--|----------------------------|----------------|-----------------|-----------------|-----------------|-----------------|
| API Gravity  | ASTM D287                  | 28.39          | 27.49           | 26.25           | 25.72           | 25.55           |
| AGMA #   |                            | 2EP            | 3EP             | 4EP             | 5EP             | 6EP             |
| Specific Gravity @ 15.6°C (60°F)   | ASTM D1298                 | 0.885          | 0.890           | 0.897           | 0.900           | 0.901           |
| Viscosity @ 40°C, cSt  | ASTM D445                  | 68             | 100             | 150             | 220             | 320             |
| Viscosity Index  | ASTM D 2270                | 116            | 104             | 101             | 101             | 101             |
| Flash Point, COC, °C (°F)  | ASTM D92                   | 235<br>(455)   | 240<br>(464)    | 240<br>(464)    | 240<br>(464)    | 250<br>(482)    |
| Pour Point, °C (°F)  | ASTM D97                   | -35<br>(-31)   | -30<br>(-22)    | -30<br>(-22)    | -25<br>(-13)    | -25<br>(-13)    |
| F Z G Gear Test , Fail stage<br>(A/8.3/90)                               | ISO 14635-1<br>/ DIN 51354 | >12            | >12             | >12             | >12             | >12             |
| Foam Test Seq 1 , ml   | ASTM D 892                 | 0/0            | 0/0             | 0/0             | 0/0             | 0/0             |
| 4-Ball EP Test, Load-wear index, kg<br>Weld Point, kgD-2783              | ASTM D 2783                | 49<br>400      | 49<br>400       | 47<br>400       | 47<br>400       | 48<br>350       |
| 4-Ball Wear Test, 20kg, 1 hr., 1800<br>rpm, 54°C ,Wear scar diameter, mm | ASTM D 2266                | 0.35           | 0.35            | 0.35            | 0.4             | 0.4             |
| Timken OK Load, lb   | ASTM D 2782                | 65             | 65              | 65              | 75              | 75              |

| Test   | Method                     | SBEP 460     | SBEP 680     | SBEP 1000     | SBEP 1500     |
|--|----------------------------|--------------|--------------|---------------|---------------|
| API Gravity  | ASTM D287                  | 24.85        | 23.14        | 21.47         | 20.65         |
| AGMA #   |                            | 7EP          | 8EP          | 8A EP         | 9EP           |
| Specific Gravity @ 15.6°C (60°F)   | ASTM D1298                 | 0.905        | 0.915        | 0.925         | 0.930         |
| Viscosity @ 40°C, cSt  | ASTM D445                  | 460          | 680          | 1000          | 1500          |
| Viscosity Index  | ASTM D 2270                | 100          | 95           | 90            | 90            |
| Flash Point, °C (°F)   | ASTM D92                   | 260<br>(500) | 260<br>(500) | 280<br>(536)  | 310<br>(590)  |
| Pour Point, °C (°F)  | ASTM D97                   | -15<br>(5)   | -15<br>(5)   | -12<br>(10.4) | -12<br>(10.4) |
| F Z G Gear Test , Fail stage<br>(A/8.3/90)                               | ISO 14635-1<br>/ DIN 51354 | >12          | >12          | >12           | >12           |
| Foam Test Seq 1 , ml   | ASTM D 892                 | 0/0          | 0/0          | 0/0           | 0/0           |
| 4-Ball EP Test, Load-wear index, kg                                      | ASTM D 2783                | 54           | 49           | 55            | 55            |
| Weld Point, kg   |                            | 350          | 300          | 250           | 250           |
| 4-Ball Wear Test, 20kg, 1 hr., 1800<br>rpm, 54°C ,Wear scar diameter, mm | ASTM D 2266                | 0.4          | 0.4          | 0.45          | 0.45          |
| Timken OK Load, lb   | ASTM D 2782                | 80           | 80           | 70            | 70            |

*The above characteristics are average values based on recent production .Minor variations which do not affect product performance are to be expected in normal manufacture .*

**WARNING :**

Continuous contact with used oil has caused skin cancer in animal tests. Avoid prolonged contact. Thoroughly wash exposed areas with soap and water. Keep out of reach of children. Don't pollute. Conserve resources. Return used oil and bottle to collection centers

*Reference SDS Number12036 database on our website at [www.amtecol.com](http://www.amtecol.com)  
OR scan the code for a direct link*

