# WHITMORE'S

## **TECHNICAL DATA SHEET**

### DECATHLON<sup>™</sup> HC, DE, AND PG SYNTHETIC AIR COMPRESSOR LUBRICANTS

Decathlon<sup>™</sup> synthetic air compressor lubricants are manufactured from the finest synthetic hydrocarbon, diester and polyglycol fluids Decathlon™ synthetic air compressor fluids impart available. excellent resistance to oxidation demanded by the sophisticated air systems manufactured today. Decathlon™ synthetic fluids provide excellent low temperature characteristics while maintaining their stability at elevated temperatures.

The HC Series fluids are acceptable for specific type rotary screw, centrifugal and reciprocating compressors. They are formulated with PAO's (polyalphaolefins) base stocks.

The DE Series fluids are acceptable for specific type rotary and reciprocating compressors. They are formulated with diester base stocks.

The PG Series fluids are acceptable for specific type rotary compressors only. They are formulated with polyglycol base stocks.

#### **BENEFITS:**

- REDUCED MAINTENANCE COSTS excellent solvency eliminates harmful varnish and sludge deposits, reducing downtime.
- REDUCES CONSUMPTION low volatility, superior oxidation resistance and sheer resistance, causing less viscosity breakdown means less lubricant leaving your system due to vapor formation.
- ENERGY SAVINGS lower coefficients of friction and higher thermal stability reduce friction and result in reduced power consumption.
- OPERATING SAFETY flash and auto-ignition temperatures are much higher than conventional petroleum products. This lowers the risk of fire and explosions commonly traced to high carbon deposits and excess lubrication.

#### APPLICATIONS:

Depending on your individual type of compressors and their OEM (Original Equipment Manufacturer) requirements, Whitmore can supply you with the right type of synthetic fluid.

| ASTM #  |   | TYPICAL CHARACTERISTICS |           |           |           |           |           |           |
|---------|---|-------------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|         | Product                                 | HC-32                   | HC-46     | HC-68     | DE-68     | DE-100    | PG-46     | PG-68     |
|         | ISO Grade                               | 32                      | 46        | 68        | 68        | 100       | N/A       | N/A       |
|         | SAE Grade                               | 10W                     | 20W       | 20        | 20        | 30        | 5W-20     | 10W-20    |
|         | AGMA Grade                              | N/A                     | 1         | 2         | 2         | 3         | N/A       | 2         |
| D-445   | Kinematic Viscosity                     |                         |           |           |           |           |           |           |
|         | cSt @ 40°C                              | 32.1                    | 47.0      | 62.0      | 70.3      | 107.2     | 39.0      | 54.9      |
|         | cSt @ 100°C                             | 6.1                     | 8.0       | 10.0      | 8.1       | 10.9      | 7.1       | 9.32      |
| D-2161  | Saybolt Viscosity                       |                         |           |           |           |           |           |           |
|         | SUS @ 100°F                             | 151                     | 220       | 315       | 306       | 497       | 199       | 279       |
|         | SUS @ 210°F                             | 46                      | 52        | 60        | 52        | 61        | 49        | 57.7      |
| D-2270  | Viscosity Index                         | 150                     | 146       | 146       | 96        | 86        | 134       | 153       |
| D-97    | Pour Point, °F (°C)                     | -65 (-54)               | -55 (-48) | -55 (-48) | -40 (-40) | -30 (-34) | -55 (-48) | -50 (-46) |
| Gardner | <b>Density</b> , lb/gal @ 60°F (15.5°C) | 7.19                    | 7.18      | 7.31      | 8.08      | 8.03      | 8.12      | 8.007     |
| Method  | Specific Gravity, g/cc @60°F (15.5°C)   | 0.863                   | 0.862     | 0.878     | 0.940     | 0.960     | 0.985     | 0.960     |
| D-92    | Flash Point, °F (°C)                    | 450                     | 475       | 475       | 465       | 470       | 480       | 490       |
|         | Cleveland Open Cup                      | (232)                   | (246)     | (246)     | (241)     | (243)     | (249)     | (254)     |
| D-4172  | Four Ball Wear                          | . ,                     | . ,       | . ,       | . ,       | . ,       | . ,       | · · /     |
|         | Scar Width, mm @ 40 kgf                 | 0.40                    | 0.40      | 0.45      | 0.57      | 0.50      | 0.50      | 0.25      |
| D-665   | Rust Test, Distilled Water              | Pass                    | Pass      | Pass      | Pass      | Pass      | Pass      | Pass      |
| D-130   | Copper Strip Corrosion                  | 1A                      | 1A        | 1A        | 1A        | 1A        | 1A        | 1A        |
|         | 212°F (100°C) @ 3 hr                    |                         |           |           |           |           |           |           |
| D-2155  | Auto-Ignition Temp, °F (°C)             | 730                     | 745       | 745       | 765       | 780       | 750       | 750       |
|         |   | (387)                   | (396)     | (396)     | (407)     | (415)     | (398)     | (399)     |
| D-943   | Oxidation Test                          | NR                      | >10,000   | NR        | NR        | NR        | NR        | NR        |

The above are average values. Minor variations which do not affect product performance are to be expected in normal manufacturing.

PACKAGING

Nonreturnable

Totes

#### Drums THE WHITMORE MANUFACTURING COMPANY

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Pails

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Performance Under Pressure Since 1893

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