

## SYNTHETIC AIR COMPRESSOR

**DSL® SERIES Lubricants**

*Summit DSL® synthetic lubricants are unique combinations of quality diester base stocks and the latest additive technology.*

Summit provides a wide range of DSL® lubricants that cover applications for rotary vane, rotary screw, and all ages and design types of reciprocating compressors.

*Summit DSL® lubricants are especially noted for the following benefits:*

- Low temperature fluidity
- Better thermal conductivity-reduces operating temperature
- Reduced friction – approximately 20% lower coefficient of friction.
- High temperature thermal stability will not disassociate under thermal stress.
- Greater resistance to mechanical stress will not shear under heavy loads or extreme stress.
- Reduced metal-to-metal wear-polar properties provided better metal wetting
- Better demulsibility characteristics-moisture separates readily, providing better rust and corrosion protection.
- More energy efficiency.

These lubricants are designed for use in the crankcase and as a cylinder lubricant. They are compatible with almost all elastomers used in compressors and pumps, including paint used in crankcases.

**COMPATIBILITY:**

The following materials are compatible for use with DSL® lubricants:

Epoxy Paint, Celcon, Viton®, High Nitrile Rubber (Buna N, NBR-greater than 36% Acrylonitrile), Medium Nitrile Rubber (Buna N, NBR 30-36% Acrylonitrile), Teflon®, Oil Resistant Alkyd, and Nylon.

**Summit DSL®-32** is recommended for use in the following applications:

- Centrifugal Compressors
- Certain rotary screw & vane compressors
- Low temperature lubrication
- High temperature lubrication
- General lubrication for applications requiring an ISO 32 lubricant

**Summit DSL®-100** is recommended for use in the following applications:

- Reciprocating compressors
- Rotary vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- General lubrication for applications requiring an ISO 100 lubricant

**Summit DSL®-46 and DSL®-68** are recommended for use in the following applications:

- Rotary screw and vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- Mist lubrication systems
- General lubrication for applications requiring an ISO 46 or ISO 68 lubricant

**Summit DSL®-125 and DSL®-150** are recommended for the following applications:

- Reciprocating compressors
- Rotary vane compressors
- Ball and roller bearings
- Low temperature lubrication
- High temperature lubrication
- General lubrication for applications requiring an ISO 150 lubricant



# Product Data Sheet

**NOTE:** The information in this publication is the result of careful testing in our laboratories, complemented by selected literature. It does not in any way constitute a guarantee, nor does it serve as a license to operate any patent. Due to widely varying conditions of product use, which are beyond our control, it is strongly recommended that the product be tested for suitability. Product typical properties in this publication are current as of May 13, 2002.

## DSL<sup>®</sup> SERIES (Diester) Physical Properties

| PRODUCTS                    | DSL <sup>®</sup> -32 | DSL <sup>®</sup> -46 | DSL <sup>®</sup> -68 | DSL <sup>®</sup> -100 | DSL <sup>®</sup> -125 | DSL <sup>®</sup> -150 |
|-----------------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------|
| ISO Viscosity Grade         | 32                   | 46                   | 68                   | 100                   | 100/150*              | 150                   |
| Viscosity:                  |                      |                      |                      |                       |                       |                       |
| @ 40°C, cSt                 | 31.5                 | 42.0                 | 65.0                 | 98.5                  | 127                   | 151                   |
| @ 100°C, cSt                | 5.00                 | 5.74                 | 8.35                 | 10.9                  | 13.6                  | 15.2                  |
| Viscosity Index             | 74                   | 66                   | 97                   | 94                    | 103                   | 101                   |
| Specific Gravity            | 0.9400               | 0.965                | 0.9640               | 0.9610                | 0.9570                | 0.9560                |
| Density lbs/gal             | 7.837                | 8.037                | 8.037                | 8.008                 | 7.975                 | 7.962                 |
| Pour Point, °F (°C)         | -65 (-54)            | -65 (-54)            | -40 (-40)            | -30 (-34)             | -30 (-34)             | -30 (-34)             |
| Flash Point, °F (°C)        | 490 (254)            | 470 (244)            | 490 (254)            | 495 (257)             | 495 (257)             | 505                   |
| Autoignition Point, °F (°C) | 765 (407)            | 720 (373)            | 765 (407)            | 780 (416)             | 785 (418)             | 785 (418)             |
| Copper Corrosion            | 1A                   | 1A                   | 1A                   | 1A                    | 1A                    | 1A                    |

**DSL<sup>®</sup> SERIES (Diester)**  
*SPECIAL NOTE: Summit DSL<sup>®</sup> lubricants are not compatible with some elastomers used in compressors and pumps including some paint used in crankcases. Consult the Material Compatibility Guide for specific recommendations.*

**SYNTHETIC AIR COMPRESSOR**

\*DSL<sup>®</sup>125 falls between the ISO-100 and ISO 150 viscosity range.

DSL<sup>®</sup>1220 Available upon request