

**WearGuard™ D-A SYN 4000 Series** is formulated with **ChemGuard™** diester additive technology system for use in rotary vane, sliding vane, and reciprocating compressors or vacuum pumps. Scheduled changes can be extended to as much as 4,000-8,000 hours for sump pumps and crankcases. This product is specially formulated with diester base oils for use in a wide variety of applications.

**WearGuard™ D-A SYN 4100 & D-A SYN 4150** can be used for cylinder and frame lubrication in reciprocating compressors and vacuum pumps using the following gases:

|                      |             |                         |                 |
|----------------------|-------------|-------------------------|-----------------|
| Air                  | Ethylene    | Methane                 | Propane         |
| Butadiene            | Natural Gas | Synthesis Gas           | Carbon Monoxide |
| Carbon Dioxide (dry) | Helium      | Hydrogen Sulphide (dry) | Nitrogen        |
| Furnace (crack) Gas  | Hydrogen    | Sulphur Hexafluoride    |                 |

Nominal Operating Range is -15° C to 230° C (5° F to 445° F)

## Applications

- Rotary Vane
- Reciprocating
- Sliding Vane
- Vacuum Pumps

## Characteristics

- Outstanding thermal and oxidative stability
- Will not varnish or form carbon deposits
- Wide operating temperature range
- Built in detergency action
- Extended drain intervals reduce oil disposal, thus increasing cost effectiveness

## Typical Properties

| WearGuard™<br>D-A SYN 4000 Series           | ASTM<br>Method | WearGuard<br>D-A SYN<br>4032 | WearGuard<br>D-A SYN<br>4046 | WearGuard<br>D-A SYN<br>4068 | WearGuard<br>D-A SYN<br>4100 | WearGuard<br>D-A SYN<br>4150 |
|---|----------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| SAE Grade                                   | –              | 10                           | 10W-20                       | 20                           | 30                           | 40                           |
| ISO Viscosity Grade                         | D2422          | 32                           | 46                           | 68                           | 100                          | 150                          |
| Viscosity, cSt, 40° C/100° C                | D445           | 36.3 / 5.9                   | 45.4 / 6.5                   | 58.1 / 7.2                   | 91.4 / 9.3                   | 146.5 / 13.3                 |
| Viscosity Index                             | D2270          | 106                          | 89                           | 75                           | 71                           | 90                           |
| Pour Point, °C / °F                         | D97            | -48 / -54                    | -40 / -40                    | -38 / -35                    | -29/-30                      | -34/-30                      |
| Flash Point, °C / °F                        | D92            | 252 / 486                    | 252 / 485                    | 252 / 485                    | 260/500                      | 271/520                      |
| Carbon Residue %                            | D189           | <0.02                        | <0.02                        | <0.02                        | <0.02                        | <0.02                        |
| Evaporation %                               | D972           | 1.0                          | 1.0                          | 1.0                          | 0.98                         | 0.90                         |
| Foaming Sequences I, II, III                | D892           | Nil                          | Nil                          | Nil                          | Nil                          | Nil                          |
| Copper Corrosion 3hr @ 100° C               | D130           | 1a                           | 1a                           | 1a                           | 1b                           | 1a                           |
| Four Ball Wear 40kg,<br>1200rpm 1hr @ 75° C | D4172          | –                            | –                            | –                            | 0.38mm                       | 0.38mm                       |
| Specific Gravity                            | D1298          | 0.96                         | 0.96                         | 0.96                         | 0.95                         | 0.94                         |
| USDA Authorization                          | –              | H-2                          | H-2                          | H-2                          | H-2                          | H-2                          |
| Demulsibility @ 130° F                      | D1401          | Excellent                    | Excellent                    | Excellent                    | Excellent                    | Excellent                    |

