### **ACIVAC AND ACILUBE** Synthetic Lubricants for Acid Gas Service



### Acivac™

Acivac<sup>™</sup> is recommended for lubricating rotary vane vacuum pumps that operate in acidic environments. Acivac<sup>™</sup> is not recommended for use with strong oxidizers such as nitric acid or chlorine.

Most lubricants severely react with acids to form sludge, which causes the blades to stick, to wear prematurely and / or to break. Acivac<sup>TM</sup> minimizes the effects of acids on the oil, which greatly extends both the life of the oil and the pumps. Acivac<sup>TM</sup> reduces the downtime caused by pumps that no longer can maintain proper vacuums and is recommended for vacuums in the presence of acids such as HCl, H<sub>2</sub>SO<sub>4</sub>, H<sub>2</sub>S, and HBr.

#### *Acilube*™

Acilube<sup>™</sup> is recommended for lubricating compressors in acidic environments.

Acilube<sup>TM</sup> has all of the performance benefits of Acivac<sup>TM</sup> but it also contains Royal Purple's proprietary Synerlec<sup>®</sup> additive technology, which is a high film strength, synthetic additive system that is proven to make equipment run smoother, cooler, quieter, longer and more efficiently. Acilube<sup>TM</sup> is formulated to provide extra corrosion protection to metal surfaces subjected to acid gases.

# Performance Advantages of Acilube<sup>™</sup> and Acivac<sup>™</sup>:

Longer Service Life

Acivac<sup>™</sup> and Acilube<sup>™</sup> have outstanding oxidation stability and are formulated for service in acidic environments to greatly extend oil change intervals while keeping equipment clean.

Reduced Downtime

Acivac<sup> $^{\text{TM}}$ </sup> and Acilube<sup> $^{\text{TM}}$ </sup> reduce wear and increase pump life and reliability.

Low Coefficient of Friction

Acivac<sup> $^{TM}$ </sup> and Acilube<sup> $^{TM}$ </sup> have a lower coefficient of friction than conventional mineral oils, which promotes greater energy savings.

Rapidly Separate from Water

Acivac<sup> $^{\text{TM}}$ </sup> and Acilube<sup> $^{\text{TM}}$ </sup> rapidly and completely separate from water.

## $\operatorname{Synerlec}^{\mathbbm R}$ additive technology makes the difference!

Synthetic oils enable Royal Purple to make superior lubricants, but it is Royal Purple's advanced Synerlec<sup>®</sup> additive technology that gives its lubricants their amazing performance advantages. Synerlec<sup>®</sup> additive technology truly is *beyond synthetic*.<sup>™</sup>

Synerlec<sup>®</sup> additive technology forms a tough, slippery, synthetic film on all metal surfaces. This proprietary film significantly improves lubrication: first, by increasing the oil film's thickness, and second, by increasing the oil film's toughness, both of which help to prevent metal-to-metal contact. It displaces moisture from metal surfaces and protects all metals against rust and corrosion. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.



### Acivac<sup>™</sup>

|                                | ISO Grade |      |      |      |  |  |
|--------------------------------|-----------|------|------|------|--|--|
| Typical Properties             | 32        | 46   | 68   | 100  |  |  |
| Viscosity                      |           |      |      |      |  |  |
| cSt @ 40°C                     | 32        | 46   | 68   | 100  |  |  |
| cSt @ 100°C                    | 5.8       | 7.4  | 9.6  | 12.7 |  |  |
| SSU @100°F                     | 165       | 236  | 350  | 517  |  |  |
| SSU @ 210°F                    | 46        | 51   | 59   | 71   |  |  |
| Viscosity Index                | 124       | 124  | 124  | 122  |  |  |
| Flash °F                       | 475       | 500  | 455  | 430  |  |  |
| Fire °F                        | 535       | 550  | 520  | 500  |  |  |
| Pour Point °F                  | -60       | -70  | -60  | -65  |  |  |
| Acid No.                       | 4.0       | 4.0  | 4.0  | 4.0  |  |  |
| Demulsibility                  |           |      |      |      |  |  |
| (from 40/40/0/6 to 40/40/0/10) | Pass      | Pass | Pass | Pass |  |  |
| Corrosion Test                 |           |      |      |      |  |  |
| 3 Hrs. @ 210°F                 | 1A        | 1A   | 1A   | 1A   |  |  |
| Rust Test                      |           |      |      |      |  |  |
| Fresh Water                    | Pass      | Pass | Pass | Pass |  |  |
| Salt Water                     | Pass      | Pass | Pass | Pass |  |  |

\*Properties are typical and may vary

### **Acilube**<sup>™</sup>

|                                | ISO Grade |      |      |      |      |      |  |  |
|--------------------------------|-----------|------|------|------|------|------|--|--|
| Typical Properties             | 20        | 32   | 46   | 68   | 100  | 150  |  |  |
| Viscosity                      |           |      |      |      |      |      |  |  |
| cSt @ 40°C                     | 20        | 32   | 46   | 68   | 100  | 150  |  |  |
| cSt @ 100°C                    | 4.3       | 5.8  | 7.4  | 9.6  | 12.7 | 15.9 |  |  |
| SSU @100°F                     | 105       | 165  | 236  | 350  | 517  | 784  |  |  |
| SSU @ 210°F                    | 41        | 46   | 51   | 59   | 70   | 84   |  |  |
| Viscosity Index                | 123       | 125  | 124  | 124  | 122  | 110  |  |  |
| Flash °F                       | 445       | 460  | 495  | 485  | 440  | 400  |  |  |
| Fire °F                        | 485       | 510  | 530  | 550  | 485  | 455  |  |  |
| Pour Point °F                  |           | <-70 | -55  | -50  | -40  | -25  |  |  |
| Acid No.                       | 3.5       | 3.5  | 3.5  | 3.5  | 3.5  | 3.5  |  |  |
| Demulsibility                  |           |      |      |      |      |      |  |  |
| (from 40/40/0/6 to 40/40/0/10) | Pass      | Pass | Pass | Pass | Pass | Pass |  |  |
| Corrosion Test                 |           |      |      |      |      |      |  |  |
| 3 Hrs. @ 210°F                 | 1A        | 1A   | 1A   | 1A   | 1A   |      |  |  |
| Rust Test                      |           |      |      |      |      |      |  |  |
| Fresh Water                    | Pass      | Pass | Pass | Pass | Pass |      |  |  |
| Salt Water                     | Pass      | Pass | Pass | Pass | Pass |      |  |  |

\*Properties are typical and may vary