# **ULTRA-PERFORMANCE GREASE**<sup>®</sup> Special Purpose Synthetic Grease – Base Oil Grades 32, 46, 68



### **Beyond Synthetic**<sup>™</sup>

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 are recommended for lubricating bearings operating at high speeds or at very low temperatures that require a grease with light viscosity oils.

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 are designed for use in high speed bearings such as fan and spindle bearings. Their tough, slippery, synthetic, EP film adheres tenaciously to metal, providing superior lubrication, excellent water resistance to both emulsion and washout and high temperature stability. These greases also have excellent low temperature fluidity, which makes them ideal for service in low temperatures.

# Synslide<sup>®</sup> additive technology makes the difference!

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

Synslide<sup>®</sup> additive technology is Royal Purple's toughest EP lubricating film. It provides maximum protection under boundary lubrication conditions typically caused by heavily loaded, slow speed and / or shock-load conditions.

This tough, proprietary, slippery film significantly improves lubrication and reduces wear by increasing both oil film thickness and oil film toughness, which helps to prevent metal-to-metal contact.

Synslide<sup>®</sup> additive technology is noncorrosive, displaces water from metal surfaces and excels in protecting equipment in wet environments. It also fortifies the oil against the detrimental effects of heat, which causes oil to oxidize.

### Performance Advantages:

#### • Aluminum Complex Grease Base

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 contain an adhesive, non-drip base that possesses superior sheer stability, water resistance and high temperature performance. They have the only reversible grease base that can return to a grease after melting.

#### • Greater Wear Protection

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 protect anti-friction and journal bearings and sliding surfaces better than other EP greases and provide superior protection under all loads even in squeeze film and boundary lubrication conditions that occur in heavy loads.

#### Reduces Vibrations

The tough oil film of Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 coupled with their ability to micro-polish contacting bearing elements provide superior bearing lubrication.

#### • Multi-Temperature Service

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 combine both good low temperature pumpability and excellent high temperature stability and are suitable for centralized pressure systems.

#### Exceptional Water Resistance

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 will not mix with or be washed off by water. They excel in tough, subsea applications.

#### • Outstanding Oxidation Stability

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 promote clean, deposit-free bearings for better performance, providing a margin of safety for missed or extended relubrication intervals.

#### • Excellent Rust and Corrosion Protection

Ultra-Performance<sup>®</sup> Greases 32, 46 and 68 protect metal surfaces in wet or dry environments during operation and shutdown.

#### • Environmentally Responsible

All Ultra-Performance  $^{\textcircled{B}}$  Greases 32, 46 and 68 components are TSCA listed and meet EPA, RCRA and OSHA requirements.

Special Purpose Synthetic Grease



	ISO Grade		
Typical Properties*	32	46	68
NLGI Grade	2	2	2
Viscosity			
cSt @ 40°C	32	46	68
Viscosity Index	100	>90	>90
Drop Point °F	>500	>500	>500
Flash Point °F	>380	>380	>380
Auto Ignition Point °F	>500	>500	>500
Penetration @ 77°F			
60 Stroke mm x 10-1	280-310	265-295	265-295
Texture	Buttery	Buttery	Buttery
Thickener Type (soap base)	Alum. Complex	Alum. Complex	Alum. Complex
Fluid Type	Synthetic	Synthetic	Synthetic
Specific Gravity	0.90	0.90	0.90
Density (lbs./gal.)	7.5	7.5	7.5
Four Ball Wear Test			
Scar diam, mm, 40kg			
1200 rpm, 165°F, 1hr.	<0.7	<0.7	<0.6
Four Ball Weld, kgf.	400	400	400
Oxidation Resistance			
PSI Drop, 100 hrs	<5.0	<5.0	<5.0
Copper Strip Corrosion	1A	1A	1A
Oil Separation			
(FTMS 791B, M 321.2)	<5.0	<5.0	<5.0

\*Properties are typical and may vary