



### *Synthetic strength for severe industrial service*

Endura 79 is a hybrid synthetic grease formulated with a calcium sulfonate and inorganic thickener system. This advanced thickener technology provides exceptional mechanical stability, high load-carrying capability, and excellent resistance to water, oxidation, and corrosion. The hybrid synthetic base oil system contributes to reliable performance across wide temperature ranges and demanding industrial operating conditions.

### **PAO synthetic base oil for extended service life**

Formulated with a PAO synthetic base oil, Endura 79 delivers extended service life through superior thermal stability, excellent oxidation resistance, and consistent viscosity control. This advanced base oil technology reduces lubricant degradation, minimizes relubrication frequency, and ensures reliable performance under high loads, elevated temperatures, and severe industrial operating conditions.

### **Thermal & Mechanical Stability**

Outstanding thermal and mechanical stability is provided by the calcium sulfonate thickener combined with a PAO synthetic base oil. The grease exhibits a dropping point  $\geq 300$  °C (ASTM D2265), excellent shear stability with minimal penetration change, and low oil separation ( $\leq 0.1\%$  at 24 h, ASTM D1742). This ensures consistent film strength, resistance to mechanical breakdown, and reliable lubrication under high temperatures, heavy loads, vibration, and shock loading in severe industrial applications.

### **EP / AW Performance**

Endura 79 provides strong extreme pressure and anti-wear performance, demonstrated by a Timken OK Load  $\geq 27$  kg (ASTM D2509), a Four-Ball EP weld load  $\geq 500$  kg (ASTM D2596), and a Four-Ball wear scar  $\leq 0.35$  mm (ASTM D2266). These results indicate effective load-carrying capability, reduced metal-to-metal contact, and reliable wear protection under high loads and severe operating conditions.

### **Exceptional Water & Dust Resistance**

Exceptional water and dust resistance ensures reliable protection in wet, dusty, and highly contaminated environments. The advanced calcium sulfonate complex thickener forms a strong, adhesive lubrication film that resists water washout and prevents the ingress of dust, dirt, and abrasive particles, maintaining consistent performance, reduced wear, and long-lasting protection under heavy loads and continuous industrial operating conditions.

Endura 79 demonstrates excellent resistance to water washout, with a measured loss of  $\leq 2.5\%$  at 79 °C (ASTM D1264). This performance makes it well suited for dredging applications and other environments with continuous water exposure, where lubrication film retention is critical.

### **Applications.**

- Bearings operating at high or low temperatures
- Bearings exposed to water, moisture, or washdown conditions
- Bearings operating at low or high speeds (RPM)
- Calendar rolls and process rolls
- Gearboxes where grease lubrication is specified
- Roller and plain bearings
- Industrial equipment in adverse, dusty, or contaminated environments
- Electric motors
- Rotary joints and couplings
- Crusher and mill bearings

## Key Benefits

Excellent resistance to high loads and shock loading enables Endura 79 to maintain a strong, stable lubrication film under severe operating conditions. The calcium sulfonate thickener system provides high load-carrying capability, protects against metal-to-metal contact, and withstands vibration and impact, ensuring reliable performance in heavy-duty industrial applications.

Designed to support extended relubrication intervals, Endura 79 resists water washout, oxidation, and mechanical breakdown, helping maintain grease stability and reduce lubrication frequency in demanding industrial applications.

## Superior Corrosion Resistance

Endura 79 provides outstanding corrosion and rust protection through the inherent chemistry of the calcium sulfonate (Ca-SO<sub>2</sub>) thickener system. Calcium sulfonate greases naturally contain overbased calcium compounds that neutralize acidic contaminants and form a strong, protective barrier on metal surfaces.

Rust protection performance is confirmed by a pass rating in the ASTM D1743 rust test (48 hours at 52 °C), ensuring reliable protection in wet, humid, and highly corrosive industrial environments.

## Typical Properties

N.L.G.I. Grade	1	2
Penetration(after 60 strokes)@25C (ASTEM D 217)	310	275
Drop Point © (ASTM D2265)	300	300
Timken OK Charge (kg) (ASTM D2509)	27	27
Oil Separation(24hrs @25C) (ASTM D1742)	0.10%	0.10%
Temperature Range ©	-20 to 220	-5 to 240
Minimum distribution temperature ©	-60	-25
Base Oil Viscosity (cSt @40C @ 100C) (ASTM D445)	140	226
	14	22.5
Roll stability penetration (ASTM D1831)	19	19
4- Ball wear test m/m scar, 40kg,1200rpm, 75C.1h ASTM D2266	0.38	0.32
Soldering point EP 4 balls (ASTM D2596)	500	500
Rust test (48hrs @ 52C) (ASTM D1743)	111	111
Oxidation stability (ASTm D942)@ 100hrs	<1	
Color	Red	

**Available in 400g cartridges, 35lb Pails, Kegs, and Drums**