

## Better engine oils Power to protect. Power to perform.



## **TOP EP LUBRICANT HD 680**

**PRODUCT CODE: TO2614** 

**TOP EP LUBRICANT HD 680** is a high performance extreme pressure gear oils developed for lubrication of heavy duty industrial gears working under severe operating conditions. Based on high quality mineral base oil in combination with an unique additive package to ensure the following properties:

## **BENEFITS:**

- Excellent load carrying capability protects gears against scuffing and wear and offers long equipment life and reduced maintenance costs.
- High thermo-oxidative stability helps resist deposit formation, provides enhanced system cleanliness and enables longer service intervals.
- Provides effective rust and corrosion protection to all gearbox components.
- Excellent demulsibility property enables trouble-free operation in conditions encountering water/ moisture.

Exceeds the following performance requirements:

- DIN 51517-3 CLP
- ISO 12925-1 CKC
- AGMA 9005 E-02
- US Steel 224
- David Brown S1.53.101

## **TYPICAL ANALYSIS:**

Properties	Unit	Method	Typical Value
ISO VG Grade		ISO 3448	680
Density @15°C	kg/m <sup>3</sup>	ASTM D4052	902
Kin. Viscosity @40°C	mm²/s	ASTM D7042	678
Kin. Viscosity @100°C	mm²/s	ASTM D7042	39.4
Viscosity Index		ASTM D2270	>96
Flash Point COC, min	°C	ASTM D92	>201
Pour Point	°C	ASTM D7346	-15
FZG Fail Load Stage, min		DIN 51354-2	>12
Total Acid Number	mgKOH/g	ASTM D664	<0.5



