

INDUSTRIAL GEAR OIL

Premium Synthetic Technology

GEAR CLP3 SHC

PRODUCT DESCRIPTION:

RAK GEAR CLP3 SHC Series are exceptional performance gear oils having outstanding extreme pressure characteristics and load-carrying properties, intended for use in all types of enclosed gear drives with circulation or splash lubrication systems. RAK GEAR CLP3 SHC Series is designed to stay ahead of the changing needs of gearbox technology. Gearbox technology design trends are towards smaller units with similar power throughput. This increase in power density places increased demands on gear oils. RAK GEAR CLP3 SHC Series oils are formulated to meet the stress by providing extra protection for gears, bearings and seals.

Applications:

- Typical applications include: Modern, highly loaded gearboxes used in the paper, steel, oil, textile, lumber and cement industries where gear protection and optimum oil life are required.
- Filled for life gearboxes, especially high ratio/ low-efficiency worm gears
- Remotely located gearboxes, where oil change-out is difficult
- Low temperature applications, such as ski lifts where seasonal oil changes can be avoided
- Mixer roll bearings and roll neck bearings where high temperatures are encountered
- Plastic calenders
- Severe centrifuge applications, including marine centrifuges
- Railroad A/C Traction Drives

Meets and Exceeds Performance Levels:

- AGMA EP 9005-E02
- DIN 51517-3 (CLP)
- MAG Cincinnati, Cincinnati Machine P-63 (ISO 68), P-76 (ISO 100), P-77 (ISO 150), P-74 (ISO 220), P-59 (ISO 320), P-35 (ISO 460), P-78 (ISO 1000)
- U.S. Steel 224 Specification (ISO 220, 320, 460, 680)
- FLENDER

Features:

- Superb protection from micro pitting fatigue wear as well as high resistance to traditional scuffing wear
- Excellent resistance to degradation at high temperatures
- High viscosity index
- Excellent resistance to rust and corrosion
- Excellent shear stability
- Excellent seal compatibility

RAK GEAR CLP3 SHC							
ISO Viscosity Grade	68	100	150	220	320	460	680
Viscosity, ASTM D 445							
mm ² /s @ 40°C	68	100	150	220	320	460	680
mm ² /s @ 100°C	11.6	15.3	21.1	28.5	38.5	50.7	69.0
Viscosity Index, ASTM D 2270	165	162	166	169	172	174	181
Pour Point, °C, ASTM D 97	-51	-45	-39	-36	-33	-30	-30
Flash Point, °C, ASTM D 92	225	235	220	220	225	228	225
Density @15.6 °C, ASTM D 4052, kg/l	0.86	0.86	0.86	0.87	0.87	0.87	0.87
FZG Micropitting, FVA 54, Fail Stage / Rating		10 / High	10 / High	10 / High	10 / High	10 / High	10 / High
FE 8 wear test, DIN 51819-3, D7,5/80-80. Roller wear, mg	2	2	2	2	2	2	2
Timken OK Load, ASTM D 2782, lb	65	65	65	65	65	65	65
Weld Load, kg	200	200	250	250	250	250	250
Load Wear Index, kgf	47	47	47	48	48	48	48
FZG Scuffing, Fail Stage							
Rust protection, ASTM D 665, Sea Water	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Copper Strip Corrosion, ASTM D 130, 3 hrs @ 100°C	1B	1B	1B	1B	1B	1B	1B
Demulsibility, ASTM D 1401, Time to 3ml emulsion, minutes @ 82°C	30	30	30	30	30	30	30
Foam Test, ASTM D 892, Tendency/Stability, ml/ml Sequence 1	0/0	0/0	0/0	0/0	0/0	0/0	0/0
Sequence 2	30/0	30/0	30/0	30/0	30/0	30/0	30/0

Typical Properties: