



SPIRAL EP MINERAL

PRODUCT DESCRIPTION:

SPIRAL EP gear lubricants are high performance, multipurpose mineral oil based lubricants designed for the lubrication of many types of industrial gear systems like spur, helical, and straight and spiral bevel types operating under severe and wide ranges of speeds, loads and temperatures. These oils are designed to provide outstanding wear protection and excellent thermal stability.

APPLICATION:

SPIRAL EP gear oils are recommended for industrial enclosed gearing where an AGMA extreme pressure lubricant is specified. It is designed for use in industrial gear boxes including in crushers, hoists, conveyors, winches, machine tools and lathes. It can also be used in chain drives, sprockets, plain and anti-friction bearings and slide guides.

FEATURES & BENEFITS:

- High thermal stability EP system helps maintain clean gear and bearing surfaces
- Effective EP system forms a protective film in areas of metal-to-metal contact, minimizing wear rates and maintaining efficient transfer of power
- Effective oxidation inhibitors and copper passivator minimize oil oxidation, limiting viscosity increase and promoting long drain intervals

PERFORMANCE LEVELS: Meets and Exceeds:

- DIN 51517 Part 3 CLP
- ISO 12925-1:1996 CKD
- AIST 224/US STEEL 224
- ANSI/AGMA 9004-D95/9005-E02
- DAVID BROWN S1.53.101
- GM LS 2 EP GEAR OIL
- FIVES CINCINNATI MACHINE GEAR
- FLENDER

TYPICAL PROPERTIES:

PARAMETERS	TEST METHOD	UNIT	SPIRAL EP						
			68	100	150	220	320	460	680
ISO VG			68	100	150	220	320	460	680
AGMA Grade			2 EP	3 EP	4 EP	5 EP	6 EP	7 EP	8 EP
API Gravity	-	-	31.0	30.6	29.7	28.4	27.3	26.3	26.0
Kinematic Viscosity @ 104° F / 40° C	ASTM D-7042	cSt	68.1	107.0	153.4	216.9	319.1	452.2	665.6
Kinematic Viscosity @ 212° F / 100° C	ASTM D-7042	cSt	8.7	11.8	14.8	18.5	23.7	29.9	36
Viscosity Index (min)	ASTM D-2270	-	99	98	96	95	93	92	87
Flash Point (min)	ASTM D-92	°C	230	242	248	252	260	280	280
Pour Point (max)	ASTM D-97	°C	-30	-30	-27	-21	-18	-15	-12
Timken OK Load	-	lb	65	65	65	65	65	65	65
FZG Pass Stage	ASTM D-5182	-	12	12	12	12	12	12	>12

HEALTH & SAFETY, ENVIRONMENT:

Prolonged and repeated contact with oil may cause skin disorders. Avoid contact. Wash immediately with soap and water. Do not discharge used oil in to drains or the environment. Dispose to an authorized used oil collection point. For further information on Safety Guidelines please refer to MSDS available on our website Phoenixlubricants.com