Irving Gear Oil

Extreme Heavy-Duty Gear Oil

Features & benefits

- Extends the life of critical gearbox components
- Reduces seal leakage
- Reduces operating and maintenance costs
- Tolerates elevated temperatures
- Reduces sludge formation
- Field-proven performance

Specifications

✓ Meets requirements

Specification	Gear 68	Gear 100	Gear 150	Gear 220	Gear 320	Gear 460
AIST (US Steel) 224	✓	✓	✓	✓	✓	✓
AGMA 9005-F16	✓	✓	✓	✓	✓	✓
David Brown S1.53.101 E	✓	✓	✓	✓	✓	✓
ISO 12925-1 CKC, CKD	✓	✓	✓	✓	✓	✓
JIS K 2219:2006 (Class II)	✓	✓	✓	✓	✓	✓
JOY SK025318-0004	✓	-	-	✓	✓	-
DIN 51517-3	✓	✓	✓	✓	✓	✓

Sizes & order codes

Size	Gear 68	Gear 100	Gear 150	Gear 220	Gear 320	Gear 460
18.9 L (5 US gal)	F0086640	-	F0084740	F0086340	F0086440	-
205 L (54.2 US gal) Metal	F0012250	F0011650	F0011750	F0011950	F0012150	F0004750
205 L (54.2 US gal) Plastic	-	-	-	F0086350	F0004650	-
1000 L (264 US Gal)	F0004860	F0004160	F0004260	F0004460	F0004660	-
Bulk Tote	-	-	F0107901	-	-	-
Bulk	B0004801	B0004101	B0004201	B0004401	B0004601	B0004701

Irving Gear Oils are intended for heavy-duty, Extreme Pressure (EP) oil for industrial gear sets. Each grade is blended from quality, high viscosity index (VI) paraffinic base oils.

Irving Gear Oils contain a non-lead EP, anti-rust, anti-oxidation, corrosion inhibitors and anti-foam suppressant additives. These oils are non-corrosive to yellow metal gear set components. They resist sludge formation at high temperatures and can be used up to a continuous 93ºC (200ºF) in normal service. Above this temperature, the oil should be changed more frequently, or an oil cooler should be installed.

Irving Gear Oils are formulated to protect against harmful microscopic wear caused by micropitting. The formulas help to protect gear teeth from wear at the earliest stages.

Irving Gear Oils are recommended for industrial and marine service in straight and spiral bevel, helical, herringbone and spur gear sets.

Irving Gear Oils are unsuitable for vehicle and heavy equipment differentials, transmissions and planetary gear drives, requiring extra surface-active EP protection against shock loads and broader operating temperature ranges. In these applications, use Irving HDH.

Irving Gear Oils are not suitable for use in worm gear applications.

Always consult your owner's manual for verification of fluid type and grade!
Supporting data available to demonstrate acceptable performance. Check with Sales Associate for the latest product approvals.
Please note these are typical performance indicators and can change without notice.
This data sheet replaces previous versions prior to Sept 14, 2023.
www.irvingoil.com/lubricants 1.800.574.5823

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Typical results

Test Method	Gear 68	Gear 100	Gear 150	Gear 220	Gear 320	Gear 460
AGMA GRADE	2EP	3EP	4EP	5EP	6EP	7EP
ISO GRADE	68	100	150	220	320	460
VISCOSITY (D445) cSt @ 40°C cSt @ 100°C	 69.1 9.6	 102.4 12.3	 152.4 15.9	 227.2 20.1	 322 25.1	 478.3 31.8
VISCOSITY INDEX (D2270)	119	112	107	102	100	97
ASTM COLOUR (D1500)	<4.5	<5.0	<5.0	<5.0	<5.0	<6.0
DENSITY @ 15°C (D4052), kg/L	0.87	0.88	0.88	0.89	0.90	0.91
POUR POINT (D97), °C	-34	-27	-18	-12	-10	-9
FLASH POINT (D93), °C	178	184	183	180	184	183
FLASH POINT (D92), °C	235	245	239	261	247	267
4-BALL WEAR (D4172), mm	< 0.37 [1]					
4-BALL EP (D2783) Load Wear Index, kg Weld Point, kg	 > 45 [1] > 230 [1]					
TIMKEN OK LOAD (D2782), Kg (lbs)	32 (70) [1]					
RUST PREVENTION (D665B)	Pass [1]					
COPPER CORROSION (D130) 3 hrs @ 100°C	1B [1]					
FOAM (D892) SEQUENCE I (mL/mL) SEQUENCE II (mL/mL) SEQUENCE III (mL/mL)	 10/0 20/0 5/0	 20/0 10/0 0/0	 0/0 0/0 0/0	 0/0 15/0 0/0	 0/0 15/0 0/0	 0/0 5/0 0/0

[1] Result is applicable for all grades

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