



HDH

Features

Meets or exceeds the following severe performance requirements:

- API GL-5
- API GL-6 (HDH 80W140SP)
- API MT-1
- Rockwell 076-A (80W90)
- Rockwell 076-D (85W140)
- US MIL-PRF-2105E
- Mack GO-J (approved)
- ZF

Benefits

- Outstanding service
- Full industry approvals
- Suitable for service in limited-slip differentials
- Proven performance over millions of miles

In manual transmissions HDH is recommended where oils meeting the performance requirements of API MT-1 are specified. Otherwise, use Irving FTL (80W90 mineral gear oil) or IDO UNIVERSAL SAE** 50.

For Eaton Roadranger™ extended warranty and service, use Irving SYN HDH 75W90, SYN HDH 80W140 and SYN IDO 50.

Heavy Duty Hypoid (HDH) is an amber to dark coloured straight mineral oil. HDH oils are extreme pressure (EP) automotive gear lubricants made from high quality, high viscosity index (VI) paraffinic base oils. Their special additives make them particularly effective at providing high load-carrying protection with excellent rust, corrosion and foam prevention. Excellent oxidation control and thermal stability prevents the formation of sludge and deposits, leaving clean gears after many thousands of miles service.

Irving HDH oils are also able to satisfy the top-up requirements of limited-slip differentials.

HDH is recommended for all automotive differentials, as well as transmissions where the manufacturer specifies the use of oils that meet the performance requirements of API* MT-1. In industrial applications, the excellent low-temperature characteristics of **HDH** oils make them suitable for enclosed gear sets in outdoor applications. Their high film strength gives low wear rates even in slow-speed, heavily-loaded gear sets.

HDH 75W90 is semi-synthetic where a measure of synthetic base oil is used to improve low temperature fluidity and enhance high temperature film strength.

HDH 80W90 LS is suitable for use in limited-slip differentials, giving strong performance in the Big Wheel / Little Wheel test as well as the Low Velocity Friction Apparatus.

*API : American Petroleum Institute

**SAE : Society of Automotive Engineers



Typical Performance Results

SAE GRADE	75W90	80W90	80W140	85W140	80W140 SP	80W90 LS
VISCOSITY (D-445) cSt @ 40°C cSt @ 100°C	83.2 15.7	123 14.5	233.7 28.9	444.3 30.8	252 26	124 14.7
VISCOSITY INDEX (D-2270)	202	119	162	99	132	121
BROOKFIELD VISCOSITY (D-2983) cP @ -12°C cP @ -26°C cP @ -40°C	— — 88,500	— 87,000 —	— 71,700 —	73,500 — —	— 124000 —	— 132200 —
POUR POINT (°C) (D-97)	<-40	-28	-27	-18	-32	---
CHANNEL POINT (°C)	-43	-35	-30	20	---	---
DENSITY (KG/L) @ 15°C	0.886	0.888	0.898	0.901	0.892	0.889
FLASH POINT (°C) (D-92)	196	228	216	228	202	218
TIMKEN LOAD (D-2782) (KG)	32	32	32	32	---	32

Available Package Sizes

	946ml. (1 US qt)	3.78L (1 US Gal)	20L (5.28 US Gal)	60L (15.85 US Gal)	205L (54.2 US Gal)	210L (55.5 US Gal)	500L (12 US Gal)	1000L (264 US Gal)	Bulk
HDH 75W90			X	X	X	X	X		X
HDH 80W90	X	X	X			X			X
HDH 80W140			X	X	X	X	X	X	X
HDH 85W140			X	X	X	X		X	X
HDH 80W140SP			X					X	X
HDH 80W90 LS			X			X			

Check with sales representative or website for the latest product approvals.

