Product Data Sheet

SYNTHETIC GEARS / HEAVY DUTY

SYNGEAR® SH®-1000 SERIES

GENERAL DESCRIPTION

Summit Syngear® SH®-1000 Series gear lubricants are formulated with synthetic base stocks and fortified with select additive systems to enhance their exceptional performance. The PAO base fluid used has outstanding oxidation and thermal stability, naturally high viscosity index and excellent low temperature pumpability and fluidity. The unique additive system used provides increased oxidation stability, extreme pressure properties, and maximum protection against wear, rust, corrosion and foaming.

In today's world of efficiency improvements, there has been much emphasis placed on reducing energy requirements for equipment used in plant operations. Summit Syngear® synthetic gear lubricants have proven to reduce friction, thereby reducing the input power to operate the equipment or increasing the available power output. The reduction of fluid friction results in lower lubricant operating temperatures, prolonging the life of both the lubricant and the equipment. The additive system used in this product not only reduces frictional drag, but also protects gears against failures associated with heavy loading and meets the requirements of U.S. Steel 224 specification, AGMA 9005-D94 specification, DIN 51517 Part 3 CLP specification and API GL-4 Gear Service Category.

APPLICATION

Summit Syngear® SH®-1000 Series gear lubricants are recommended for use in all types of enclosed gearing as well as plain and rolling element bearings. These lubricants are ideal for heavily loaded low speed gears and bearings where boundary or elasto-hydrodynamic lubrication (EHL) conditions exist, such as in mine hoist gear reducers. They are particularly recommended for gearboxes which operate under excessively high temperatures where good quality conventional oils rapidly oxidize. **Summit Syngear® SH®-1000 Series** gear lubricants may also be used in certain open gear applications, but it is recommended that Summit lubrication engineers be consulted to select the most effective method of application. **Summit Syngear SH®-10032, SH®-10046 and SH®-10068** are also recommended or use in piston or gear-type pumps, expecially where pressures exceed 1000 psi or when operating over a wide temperature range.

Summit Syngear® SH®-1000 Series gear lubricants are compatible with most seal materials, paints and plastics, including nitrile Buna N, neoprene, viton, teflon, polyethylene, polyurethane ether, fluorocarbon, polyacrylate, polysulfide, ethylene acrylic, epoxy, plastisol, PVC, acrylic paint and lacquer.

SUMMIT®

Klüber Lubrication NA LP • P.O. Box 131359 • Tyler, CR 2120, Texas 75713, Phone 903.534.8021 • Fax 903.581.4376

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Physical Properties

PRODUCTS	SH®-10032	SH®-10046	SH®-10068	SH®-1010	SH®-1015	SH®-1022	SH®-1032	SH®-1046	SH®-1068	SH®-1100	SH®-1150
ISO Grade	32	46	68	100	150	220	320	460	680	1000	1500
AGMA Number	--	1 EP	2 EP	3 EP	4 EP	5 EP	6 EP	7 EP	8 EP	8 EP	9 EP
Viscosity											
@ 40°C, cSt	31.0	42.9	67.1	95.7	147	232	342	490	700	947	1513
@ 100°C, cSt	5.8	7.4	9.9	12.9	17.8	25.4	32.8	43.1	54.2	66.2	95.8
Viscosity Index	132	137	130	132	133	139	134	139	134	135	143
Specific Gravity	0.849	0.851	0.859	0.862	0.868	0.877	0.878	0.882	0.892	0.890	0.892
Pour Pt. F°(C°)	-58 (-50)	-40 (-40)	-44 (-42)	-42 (-41)	-49 (-45)	-45(-43)	-40(-40)	-35(-37)	-30(-34)	-20(-28)	-17(-27)
Flash Pt. F°(C°)	470 (243)	475 (246)	480 (249)	485(252)	485(252)	485(252)	485(252)	485(252)	485(252)	485(252)	490(254)
Copper Corrosion	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Rust Test	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Timken OK, lbs	60	60	65	65	65	65	65	65	65	65	65+
Four-Ball Weld, kgs	200	200	200	200	315	315	315	315	315	400	400
Four-Ball Scar, mm	.50	.40	.30	.30	.39	.34	.30	.30	.30	.30	.30
FZG Gear Test	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass	12+ Pass

Shelf Life: Product shelf life is 5 years from the date of manufacture, after which the product should be recertified prior to use.

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