



## SUNOCO CHALLENGE PAO-EP SYNTHETIC GEAR LUBRICANTS

### OVERVIEW

SUNOCO CHALLENGE PAO-EP SYNTHETIC GEAR LUBRICANTS are formulated with synthetic base stocks and fortified with select additive systems to enhance their exceptional performance. The PAO (Polyalphaolefin) 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.

### FEATURES & BENEFITS

SUNOCO CHALLENGE PAO-EP SYNTHETIC GEAR LUBRICANTS are formulated with 100% synthetic base stocks and fortified with select additive systems to enhance their exceptional performance. The synthetic 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.

### TYPICAL PROPERTIES

	TBD	TBD	9823	9843	9853	9863	9873	9883	TBD	TBD
Product Code										
ISO Viscosity Grade	32	46	68	100	150	220	320	460	680	1000
AGMA Grade	--	1 EP	2 EP	3 EP	4 EP	5 EP	6 EP	7 EP	8 EP	8A EP
Viscosity, cSt @ 40 °C	31	42.9	67.1	95.7	147	232	342	490	700	947
Viscosity, cSt @ 100 °C	5.8	7.4	9.9	12.9	17.8	25.4	32.8	43.1	54.2	66.2
Viscosity Index	132	137	130	132	133	139	134	139	134	135
Flash Point, °C	243	246	249	252	252	252	252	252	252	252
Pour Point, °C	-50	-40	-42	-41	-45	-43	-40	-37	-34	-28
Copper Corrosion	1A	1A	1A	1A	1A	1A	1A	1A	1A	1A
Rust Prevention	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Four-Ball Weld, kgs	200	200	200	200	315	315	315	315	315	400
Four-Ball Scar, mm	.50	.40	.30	.30	.39	.34	.30	.30	.30	.30
FZG Pass, Load Stage	12+	12+	12+	12+	12+	12+	12+	12+	12+	12+
Specific Gravity	.849	.851	.859	.862	.868	.877	.878	.882	.892	.890

### APPLICATIONS

SUNOCO CHALLENGE PAO-EP SYNTHETIC 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 such as mine hoist gear reducers. They are particularly recommended for gearboxes which operate under excessively high temperatures where good quality conventional oils rapidly oxidize.

SUNOCO CHALLENGE PAO-EP SYNTHETIC 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.

### SPECIFICATIONS

API GL-4 • U.S. Steel 224 • AGMA 9005-D94 • DIN 51517 Part 3 CLP