



SUNOCO CHALLENGE PAO SYNTHETIC FLUIDS

OVERVIEW

SUNOCO CHALLENGE PAO SYNTHETIC FLUIDS are synthetic gearbox, bearing, and circulating oils that are formulated from premium polyalphaolefin (PAO) base fluids for enclosed systems requiring ashless antioxidants and anti-wear. These oils have been designed to provide proper lubrication under hydrodynamic and mild boundary lubrication conditions. They are recommended for gear systems where moderate loads and high temperatures are expected, including worm gears containing soft metals such as bronze, brass and copper.

FEATURES & BENEFITS

SUNOCO CHALLENGE PAO SYNTHETIC FLUIDS are 100% synthetic PAO lubricants formulated for wide operating temperature ranges. Their low pour points and high flash points provide increased thermal and oxidative stability over mineral based lubricants.

TYPICAL PROPERTIES

Product Code	9643	9653	9663	9673	9683	9693	9803	9813	7273	TBD
ISO Viscosity Grade	32	46	68	100	150	220	320	460	680	1000
Viscosity, cSt @ 40 °C	31.1	47.3	68.6	95.2	156.3	230.4	311.3	486.2	676.7	980.9
Viscosity, cSt @ 100 °C	5.75	7.86	10.1	12.85	18.29	24.14	29.57	41.37	54.35	98.02
Viscosity Index	127	136	132	133	131	131	130	133	140	136
Flash Point, °C	240	240	238	260	260	262	270	270	270	270
Pour Point, °C	-48	-48	-48	-45	-45	-35	-33	-27	-25	-23
Copper Corrosion	1B	1B	1B	1B	1B	1B	1B	1B	1B	1B
Rust Prevention	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass
Evaporation, %	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Specific Gravity	0.86	0.86	0.87	0.87	0.87	0.87	0.88	0.88	0.88	0.88

APPLICATIONS

SUNOCO CHALLENGE PAO SYNTHETIC FLUIDS are designed to be multipurpose lubricants that can be used a wide variety of industrial applications. They are similar to petroleum oils in their compatibility to seals, hoses, gaskets and paint. Key applications include: vacuum pumps, hydraulic systems, blowers, enclosed spur, helical, bevel & worm gear units, plain and roller contact bearings, circulating and splash lubricated systems, and mist systems.