



LE PRODUCTS
MANUFACTURED
UNDER AN ISO
9001:2000
CERTIFIED QUALITY
SYSTEM

9705-9707 SYNPATM GEAR LUBRICANTS

**Formulated to provide superior performance
under demanding operating conditions**

SYNPATM Gear Lubricants are a family of synthetic Polyalkylene Glycol (PAG) based gear lubricants. They are known for their extreme pressure characteristics and their ability to prevent micropitting. They are specially formulated for corrosion resistance, wear protection, and thermal stability.

SYNPATM Gear Lubricants are outstanding lubricants for all types of industrial gears and plain and anti-friction bearings under extreme severe service conditions. They are especially beneficial for the lubrication of worm gears.

BENEFICIAL PROPERTIES:

- Formulated with a Polyalkylene Glycol (PAG) synthetic base fluid that provides superior oxidation and thermal stability.
- Protects against micropitting.
- Extremely high viscosity index results in wide operating temperatures.
- Outstanding extreme pressure characteristics.
- Excellent corrosion prevention properties to protect against rusting in high water contamination applications.
- Highly resistant to sludge formation.



APPLICATIONS:

- Enclosed gear applications, including Helical, Bevel, Planetary, and especially Worm Gears
- Textile Machines
- Sliding Bearings
- Chains and Conveyors
- Kiln and Oven Bearings
- Roller Mills
- Pellet Mills
- Extruders

**LUBRICATION
ENGINEERS, Inc.**

Leaders in Lubricants



9705-9707 TECHNICAL DATA

PHYSICAL CHARACTERISTICS-TYPICAL:

	<u>9705</u>	<u>9706</u>	<u>9707</u>
ISO Grade	220	320	460
Viscosity,			
cSt @ 40°C	227.0	339.0	477.0
cSt @ 100°C	41.9	60.6	83.0
SUS @ 100°F	1137	1700	2393
SUS @ 210°F	200	288	394
Viscosity Index	242	252	262
Color	Light Yellow	Light Yellow	Light Yellow
Specific Gravity	1.057	1.062	1.067
Flash Point, °F (°C)	543 (284)	540 (282)	543 (284)
Pour Point, °F (°C)	-44 (-42)	-38 (-39)	-33 (-36)

PERFORMANCE TEST RESULTS:

Timken OK Load, Lbs., ASTM D-2509	75	75	75
Total Acid Number, TAN	0.30 max	0.30 max	0.30 max
4-Ball Wear, D4172, mm	0.33	0.33	0.33
FE-8 Roller Bearing, mg	Roller 3; Cage 7	Roller 3; Cage 7	Roller 3; Cage 7
FZG Micropitting, Load Stage	10 @ 90°C & 60°C	10 @ 90°C & 60°C	10 @ 90°C & 60°C
FZG Load Stage (D5182)	>12	>12	>12
Evaporation Loss, ASTM D972	0.8%	0.8%	0.8%
Foam Generation, ASTM D892			
Seq I	20:0	20:0	20:0
Seq II	0:0	0:0	0:0
Seq III	0:0	0:0	0:0

MEETS THE PERFORMANCE OF:

David Brown Type G	Flender
DIN 51517 Part 3	Hansen
FAG	Rexroth Bosch Group
SKF	

RECOMMENDATIONS:

Do not mix with any mineral oil or PAO based lubricating product as PAG's are often insoluble with these materials and will form a gelatinous material when mixed with these products. See the LE PAG Flush Procedure when performing a changeover from one of these products to one of the SYNPAAG products. PAG based lubricants can sometimes soften industrial paints, so it is recommended that internal gearbox surfaces are either not painted or coated with a resistant material. Common seal materials are unaffected by the SYNPAAG Gear Lubricants, but nitrile, Viton, flourosilicone, or vinyl-methyl polysiloxane seal and gasket materials are recommended especially when high temperatures are involved. Polyurethane based elastomers, leather, cork, asbestos, or paper seals should be avoided.

LUBRICATION
ENGINEERS, Inc.

Leaders in Lubricants

