

# **OPUS LUBRICANTS PRODUCT DATA**

# SYNOPUS INDUSTRIAL GEAR PAG OILS

#### **Description**

Synopus Industrial Gear PAG Oils are premium quality, 100 % synthetic; polyalkylene glycol based industrial gear oils containing antioxidant and anticorrosion additives, creating a lubricant with excellent thermal properties. The very high viscosity index offers fluidity down to very low temperatures and adequate film thickness at elevated temperatures. These are recommended for heavy loaded gearboxes and worm wheel boxes, including the so-called filled-for-life units.

#### **Benefits**

- Extends life span of the installation
- Reduces maintenance
- Optimal protection of gear boxes against fretting and wear
- Longer drain interval, even at higher working temperatures
- Excellent thermal and oxidation stability
- Low pour point
- Protection against rust and corrosion
- Optimal lubrication at high and low temperatures, even at heavy loads
- Very good compatibility with plugs and seals

#### Warning:

Polyalkylene glycol base is NOT compatible with mineral oils, when changeover from mineral gearbox oil to Opus Synthetic Gear Oil, the gearbox must be thoroughly drained, flushed and cleaned. Lubricants based on Polyalkylene glycol will affect certain gear case paints and shrink certain seals.

## **Typical Data**

ISO GRADE	150	220	320	460
Specific Gravity @ 15°C cSt	0.944	1.006	1.005	1.007
Kinematic Viscosity @ 100°C cSt	25.0	32.0	45.0	64.0
Viscosity Index	201	190	200	214
Pour Point (°C)	-30	-30	-30	-28
Flash Point (°C)	>200	>230	>225	>225
FZG Test (IP 334)	>12	>12	>12	>12
Copper Corrosion (IP 154)	1b	1b	1b	1b
3 hrs @ 100°C				
Rust Prevention (IP 135)				
Part A	Pass	Pass	Pass	Pass
Part B	Pass	Pass	Pass	Pass
Weld Load (IP 239)	170	170	170	170
Volume of Foam (IP 146)				
Sequence 1 mm	Nil/Nil	Nil/Nil	Nil/Nil	Nil/Nil
Sequence 2 mm	Nil/Nil	Nil/Nil	Nil/Nil	Nil/Nil
Sequence 3 mm	Nil/Nil	Nil/Nil	Nil/Nil	Nil/Nil



### Flush Procedures

When changing from mineral oil to Synopus Industrial Gear PAG Oils the following procedure should be used:

- The system should be run until the mineral oil is warm, then it is drained fully including the reservoirs, lines etc. The system should be cleaned of residual sludge.
- Flush the system with a minimum quantity of Synopus Industrial Gear PAG Oils by operating under no load, and then drain the system while the fluid is still warm. Repeat if necessary.
- Seals, etc.., should be inspected and replaced if worn. Seals previously exposed to
  mineral oil may shrink when exposed to Synopus Industrial Gear PAG Oils and therefore
  it may be advantageous to replace them. The system is then filled with Synopus
  Industrial Gear PAG Oils. It is useful to inspect the lubricant after one or two days in use
  to make sure that it is free of extraneous materials. Contamination with significant
  quantities of other lubricants can, in some cases, lead to sludging, foaming and other
  problems.

The content of this data sheet is given in good faith but without warranty.

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