

Syngear® WT Series

Synthetic gears/Heavy Duty



Your benefits at a glance

- Thermal and oxidation stability
- High viscosity index
- Low temperature pumpability and fluidity

Your requirements - our solution

Summit Syngear WT Series lubricants are fully synthetic high performance gear oils enhanced with new generation anti-micropitting additives. The PAO base oil has outstanding oxidation and thermal stability, naturally high viscosity index and excellent low temperature pumpability and fluidity. The additive system not only minimizes scuffing wear, but offers a high level of resistance to micropitting fatigue. High load carrying capability and low sludge formation make these superior lubricants a choice for many industrial applications. Syngear WT Series provides maximum protection against rust, corrosion, and foaming.

Application

Summit Syngear WT Series are recommended for highly loaded enclosed gearing as well as plain and rolling element bearings. These shear stable lubricants resist damage to gear teeth caused by repeated shock loads. Syngear WT Series lubricants are ideal for wind turbine gear boxes, mine hoist gearboxes, crane gearing, and other enclosed gearing which requires micropitting resistance. Highly loaded gearboxes in the steel, paper and cement industries are natural applications. These extended life oils perform very well in extreme environments.

Material safety data sheets

Material safety data sheets can be requested via our website <https://www.klsummit.com>. You may also obtain them through your contact person at Summit Lubrication.

Characteristics	Syngear WT-100	Syngear WT-150	Syngear WT-220	Syngear WT-320
Article number	340293	340276	340264	340265
Density, 20°C	approx. 0.849 g/cm ³	approx. 0.852 g/cm ³	approx. 0.853 g/cm ³	approx. 0.856 g/cm ³
Flash point, ASTM D92, Cleveland open cup	≥ 210 °C	≥ 210 °C	≥ 210 °C	≥ 210 °C
ISO viscosity grade, DIN ISO 3448, ISO VG	100	150	220	320
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 16.1 mm ² /s	approx. 22.5 mm ² /s	approx. 30.0 mm ² /s	approx. 39.2 mm ² /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 108 mm ² /s	approx. 162 mm ² /s	approx. 231 mm ² /s	approx. 324 mm ² /s
Viscosity index, ASTM D2270	approx. 159	approx. 166	approx. 170	approx. 173
Copper corrosion, ASTM D130, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Steel corrosion, DIN ISO 7120 / ASTM D665, method B, 24 h, 60°C	rust-free	passed	rust-free	rust-free
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -56 °C	approx. -53 °C	approx. -52 °C	approx. -46 °C

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Characteristics	Syngear WT-100	Syngear WT-150	Syngear WT-220	Syngear WT-320
Four-ball tester: wear characteristics, ASTM D4172, method: B, 1200 min ⁻¹ / 40 kgf, 60 min, 75°C	approx. 0.36 mm	approx. 0.36 mm	approx. 0.36 mm	approx. 0.34 mm
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	12+	12+	12+	12+
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months	36 months	36 months

Characteristics	Syngear WT-460	Syngear WT-680
Article number	340380	340560
Density, 20°C	approx. 0.857 g/cm ³	approx. 0.850 g/cm ³
Flash point, ASTM D92, Cleveland open cup	≥ 210 °C	≥ 210 °C
ISO viscosity grade, DIN ISO 3448, ISO VG	460	680
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 52.3 mm ² /s	approx. 70.6 mm ² /s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 465 mm ² /s	approx. 676 mm ² /s
Viscosity index, ASTM D2270	approx. 176	approx. 181
Copper corrosion, ASTM D130, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Steel corrosion, DIN ISO 7120 / ASTM D665, method B, 24 h, 60°C	rust-free	rust-free
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approx. -44 °C	approx. -40 °C
Four-ball tester: wear characteristics, ASTM D4172, method: B, 1200 min ⁻¹ / 40 kgf, 60 min, 75°C	approx. 0.34 mm	approx. 0.37 mm
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	12+	12+
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	36 months

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Summit Lubrication

Your expert in specialty lubricants. Since 1982, we have partnered with you to bring you the right solution and advanced lubrication technologies. With over 500 products, from air and gas compressor oils to refrigeration oils, we develop top-of-the-line products tailored to your specific needs. Your success is our success.

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