Información de producto

Syngear® SH®-1000 Series

Hojas de datos de seguridad

Las hojas de datos de seguridad actualizadas pueden ser solicitadas a través de nuestra página web https://www.klsummit.com.

También puede pedirlas a su interlocutor habitual en Klüber Lubrication.

Datos técnicos	SYNGEAR SH-10032	SYNGEAR SH-10046	SYNGEAR SH-10068	SYNGEAR SH-1010
Número de artículo	340124	340202	340125	340126
Service temperature, lower limit	-	-	-	-
Service temperature, upper limit	-	-	-	-
Density	0.838 g/cm³	-	-	-
Density, 20°C	-	approximately 0.848 g/cm³	approximately 0.860 g/cm³	approximately 0.866 g/cm³
Density, DIN 51757, 20°C	-	-	-	-
Flash point	204 °C	-	-	-
Flash point, ASTM D92, Cleveland open cup	-	≥ 200 °C	≥ 200 °C	≥ 200 °C
Foam test, ISO 6247 / ASTM D892, 24 min, sequence I	-	-	-	0/0 ml
Foam test, ISO 6247 / ASTM D892, 24 min, sequence III	-	-	-	0/0 ml
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	-	0/0 ml	0/0 ml	-
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	-	0/0 ml	0/0 ml	-
Foam test, ISO 6247 / ASTM D892, 93.5 min, sequence II	-	-	-	0/0 ml
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	-	0/0 ml	0/0 ml	-
ISO viscosity grade	32	-	-	100
ISO viscosity grade, DIN ISO 3448, ISO VG	-	46	68	-
Kinematic viscosity, 100°C	5.8 mm²/s	-	-	-
Kinematic viscosity, 40°C	31.0 mm²/s	-	-	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	-	approximately 7.2 mm²/s	approximately 10.2 mm²/s	approximately 13.3 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	-	approximately 43 mm²/s	approximately 69 mm²/s	approximately 99 mm²/s
Viscosity index	132	-	-	-
Viscosity index, ASTM D2270	-	approximately 129	approximately 133	approximately 137

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Datos técnicos	SYNGEAR SH-10032	SYNGEAR SH-10046	SYNGEAR SH-10068	SYNGEAR SH-1010
Viscosity index, DIN ISO 2909	-	-	-	-
Copper corrosion	1 - - corrosion degree	-	-	-
Copper corrosion, ASTM D130, 24 hours, 100°C	-	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Copper corrosion, DIN EN ISO 2160, 24 hours, 100°C	-	-	-	-
Steel corrosion, DIN ISO 7120 / ASTM D665, method A, 24 hours, 60°C	rust-free	rust-free	rust-free	rust-free
Pour point	-50 °C	-	-42 °C	-
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	-	approximately -61 °C	-	approximately -53 °C
API scuffing load capacity	-	-	-	-
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of cage	-	-	-	-
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of rolling elements	-	-	-	-
Four-ball tester: wear characteristics	0.50 mm	-	-	-
Four-ball tester: wear characteristics, ASTM D4172, method: B, 1200 min^{-1} / 40 kgf, 60 min, 75°C	-	approximately 0.40 mm	approximately 0.30 mm	approximately 0.30 mm
Four-ball tester, welding load	200 kgf	-	-	-
Four-ball tester, welding load, ASTM D2596	-	200 kgf	200 kgf	200 kgf
FZG scuffing test	12+	-	-	-
FZG scuffing test, DIN ISO 14635-1, A / 16.6 / 90, failure load stage	-	-	-	-
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	-	≥ 12	≥ 12	≥ 12
Timken test	60 lbs	-	-	-
Timken test, ASTM D2782, OK load	-	60 lbs	65 lbs	65 lbs
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months	60 months

Datos técnicos	SYNGEAR SH-1015	SYNGEAR SH-1022	SYNGEAR SH-1032	SYNGEAR SH-1046
Número de artículo	340453	340454	340455	340456
Service temperature, lower limit	-35 °C	-35 °C	-30 °C	-30 °C

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Datos técnicos	SYNGEAR SH-1015	SYNGEAR SH-1022	SYNGEAR SH-1032	SYNGEAR SH-1046
Service temperature, upper limit	140 °C	140 °C	140 °C	140 °C
Density	-	-	-	-
Density, 20°C	-	approximately 0.872 g/cm³	approximately 0.875 g/cm³	approximately 0.879 g/cm³
Density, DIN 51757, 20°C	approximately 0.866 g/cm³	-	-	-
Flash point	-	-	-	-
Flash point, ASTM D92, Cleveland open cup	≥ 200 °C	≥ 200 °C	≥ 200 °C	≥ 200 °C
Foam test, ISO 6247 / ASTM D892, 24 min, sequence I	-	-	-	-
Foam test, ISO 6247 / ASTM D892, 24 min, sequence III	-	-	-	-
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	0/0 ml	0/0 ml	0/0 ml	0/0 ml
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	0/0 ml	0/0 ml	0/0 ml	0/0 ml
Foam test, ISO 6247 / ASTM D892, 93.5 min, sequence II	-	-	-	-
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	0/0 ml	0/0 ml	0/0 ml	0/0 ml
ISO viscosity grade	-	-	-	-
ISO viscosity grade, DIN ISO 3448, ISO VG	150	220	320	460
Kinematic viscosity, 100°C	-	-	-	-
Kinematic viscosity, 40°C	-	-	-	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approximately 18.3 mm²/s	approximately 25.5 mm²/s	approximately 33.1 mm²/s	approximately 43.4 mm²/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approximately 148 mm²/s	approximately 232 mm²/s	approximately 327 mm²/s	approximately 476 mm²/s
Viscosity index	-	-	-	-
Viscosity index, ASTM D2270	approximately 139	approximately 142	approximately 143	-
Viscosity index, DIN ISO 2909	-	-	-	≥ 130
Copper corrosion	-	-	-	-
Copper corrosion, ASTM D130, 24 hours, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree
Copper corrosion, DIN EN ISO 2160, 24 hours, 100°C	-	-	-	-
Steel corrosion, DIN ISO 7120 / ASTM D665, method A, 24 hours, 60°C	rust-free	rust-free	rust-free	rust-free
Pour point	-	-	-	-
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approximately -45 °C	approximately -45 °C	approximately -41 °C	approximately -39 °C

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Datos técnicos	SYNGEAR SH-1015	SYNGEAR SH-1022	SYNGEAR SH-1032	SYNGEAR SH-1046
API scuffing load capacity	API GL 4	API GL 4	API GL 4	API GL 4
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of cage	≤ 200 mg	≤ 200 mg	≤ 200 mg	≤ 200 mg
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of rolling elements	≤ 30 mg	≤ 30 mg	≤ 30 mg	≤ 30 mg
Four-ball tester: wear characteristics	-	-	-	-
Four-ball tester: wear characteristics, ASTM D4172, method: B, 1200 min^{-1} / 40 kgf, 60 min, 75°C	approximately 0.39 mm	approximately 0.34 mm	approximately 0.30 mm	approximately 0.30 mm
Four-ball tester, welding load	-	-	-	-
Four-ball tester, welding load, ASTM D2596	315 kgf	315 kgf	315 kgf	315 kgf
FZG scuffing test	-	-	-	-
FZG scuffing test, DIN ISO 14635-1, A / 16.6 / 90, failure load stage	≥ 12	≥ 12	≥ 12	≥ 12
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 14	≥ 14	≥ 14	≥ 14
Timken test	-	-	-	-
Timken test, ASTM D2782, OK load	65 lbs	65 lbs	65 lbs	65 lbs
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months	60 months

Datos técnicos	SYNGEAR SH-1068	SYNGEAR SH-1100	SYNGEAR SH-1150
Número de artículo	340457	340458	340253
Service temperature, lower limit	-25 °C	-15 °C	-
Service temperature, upper limit	140 °C	120 °C	-
Density	-	-	-
Density, 20°C	approximately 0.887 g/cm^3	approximately 0.890 g/cm^3	approximately 0.890 g/cm^3
Density, DIN 51757, 20°C	-	-	-
Flash point	-	-	-
Flash point, ASTM D92, Cleveland open cup	≥ 200 °C	≥ 200 °C	≥ 200 °C
Foam test, ISO 6247 / ASTM D892, 24 min, sequence I	-	-	-
Foam test, ISO 6247 / ASTM D892, 24 min, sequence III	-	-	-
Foam test, ISO 6247 / ASTM D892, 24°C, sequence I	0/0 ml	0/0 ml	-
Foam test, ISO 6247 / ASTM D892, 24°C, sequence III	0/0 ml	0/0 ml	-

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Datos técnicos	SYNGEAR SH-1068	SYNGEAR SH-1100	SYNGEAR SH-1150
Foam test, ISO 6247 / ASTM D892, 93.5 min, sequence II	-	-	-
Foam test, ISO 6247 / ASTM D892, 93.5°C, sequence II	0/0 ml	0/0 ml	-
ISO viscosity grade	-	-	-
ISO viscosity grade, DIN ISO 3448, ISO VG	680	1000	1500
Kinematic viscosity, 100°C	-	-	-
Kinematic viscosity, 40°C	-	-	-
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approximately 54.0 mm^2/s	approximately 73.0 mm^2/s	approximately 101 mm^2/s
Kinematic viscosity, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approximately 668 mm^2/s	approximately 1010 mm^2/s	approximately 1468 mm^2/s
Viscosity index	-	-	-
Viscosity index, ASTM D2270	approximately 140	approximately 143	approximately 150
Viscosity index, DIN ISO 2909	-	-	-
Copper corrosion	-	-	-
Copper corrosion, ASTM D130, 24 hours, 100°C	1 - 100 - 24 corrosion degree	-	1 - 100 - 24 corrosion degree
Copper corrosion, DIN EN ISO 2160, 24 hours, 100°C	-	1 - 100 - 24 corrosion degree	-
Steel corrosion, DIN ISO 7120 / ASTM D665, method A, 24 hours, 60°C	rust-free	rust-free	rust-free
Pour point	-	-	-
Pour point, DIN ISO 3016, ASTM D97, ASTM D5950, ASTM D7346	approximately -39 °C	approximately -34 °C	approximately -29 °C
API scuffing load capacity	API GL 4	API GL 4	API GL 4
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of cage	≤ 200 mg	≤ 200 mg	≤ 200 mg
FAG FE8 rolling bearing test, DIN 51819-3, D-7.5 / 80-80, wear of rolling elements	≤ 30 mg	≤ 30 mg	≤ 30 mg
Four-ball tester: wear characteristics	-	-	-
Four-ball tester: wear characteristics, ASTM D4172, method: B, 1200 min^{-1} / 40 kgf, 60 min, 75°C	approximately 0.30 mm	approximately 0.30 mm	approximately 0.30 mm
Four-ball tester, welding load	-	-	-
Four-ball tester, welding load, ASTM D2596	315 kgf	400 kgf	400 kgf
FZG scuffing test	-	-	-
FZG scuffing test, DIN ISO 14635-1, A / 16.6 / 90, failure load stage	≥ 12	≥ 12	≥ 12

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Datos técnicos	SYNGEAR SH-1068	SYNGEAR SH-1100	SYNGEAR SH-1150
FZG scuffing test, DIN ISO 14635-1, A / 8.3 / 90, failure load stage	≥ 14	≥ 14	-
Timken test	-	-	-
Timken test, ASTM D2782, OK load	65 lbs	65 lbs	65+ lbs
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	60 months	60 months	60 months

Summit Lubrication

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