ISOFLEX TOPAS NB 52, NB 152

Synthetic rolling and plain bearing greases

Your benefits at a glance

- Longer component life when exposed to water or aqueous media due to special thickener
- Many years of successful use in the automotive and machine building industries

Your requirements - our solution

ISOFLEX TOPAS NB 52 and ISOFLEX TOPAS NB 152 are rolling and plain bearing greases based on a synthetic hydrocarbon oil and a barium complex soap. The special barium-soap thickener used in the ISOFLEX TOPAS NB 52 and 152 greases offers good load-carrying capacity as well as resistance to water and ambient media unlike other soap-based thickeners. Both products show good protection against corrosion as well as oxidation and ageing stability. The Klüber barium complex soap is ELINCS-registered and approved by GASG (Global Automotive Stakeholders Group).

ISOFLEX TOPAS NB 152 can be used in a wide service temperature range from -40 °C to 150 °C. ISOFLEX TOPAS NB 52 is suitable for temperatures between -50 °C to 120 °C and short peak temperatures up to 150 °C depending on the application, e.g. enclosed gears, car seat adjustment mechanisms.

Application

ISOFLEX TOPAS NB 52 is a versatile grease for many applications, e.g.

- rolling and plain bearings subject to high speeds and loads, also for low temperatures,
- tooth flanks in precision gears, e.g. bevel gears in milling machines, electromechanical actuators for valves,
- electric contacts and components to reduce insertion forces.

In addition, ISOFLEX TOPAS NB 152 is compatible with many plastics.

ISOFLEX TOPAS NB 152 is primarily used for rolling and plain bearings, for example wheel bearings in racing cars, fan bearings, pump bearings. The grease is also suitable for plastic/plastic or steel/plastic friction points.

Application notes

The greases are applied by spatula, brush, grease gun or cartridge. Sprays should not be exposed to direct sunlight and temperatures above 50 °C.

ISOFLEX TOPAS NB 52 is also available in our automatic lubricant dispenser Klübermatic. Please consult the application engineering experts from Klüber Lubrication to determine whether Klübermatic might be used under the conditions in your processes.

Material safety data sheets

Material safety data sheets can be requested via our website www.klueber.com. You may also obtain them through your contact person at Klüber Lubrication.

Pack sizes	ISOFLEX TOPAS NB 52	ISOFLEX TOPAS NB 52 Spray	ISOFLEX TOPAS NB 152	ISOFLEX TOPAS NB 152 UV
Cartrigde 370 g	+			
Cartridge 400 g			+	
Aerosol can 400 ml		+		
Can 1 kg	+		+	+
Bucket 10 kg	+			
Bucket 18 kg	+			

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Pack sizes	ISOFLEX TOPAS NB 52	ISOFLEX TOPAS NB 52 Spray	ISOFLEX TOPAS NB 152	ISOFLEX TOPAS NB 152 UV
Bucket 25 kg	+		+	+
Drum 180 kg	+		+	+
Cartrigde Copolyester Klübermatic STAR 120 ml	+			
Cartrigde PA 6 Klübermatic FLEX 125 ml	+			

Hint

Except for the article number and the minimum shelf life, the spray data below refer to the solvent-free spray agent.

Characteristics	ISOFLEX TOPAS NB 52	ISOFLEX TOPAS NB 52 Spray	ISOFLEX TOPAS NB 152	ISOFLEX TOPAS NB 152 UV
Article number	004131	081326	004145	004351
Composition	-	-	-	UV additive
Composition, thickener	barium complex soap	barium complex soap	barium complex soap	barium complex soap
Composition, type of oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil	synthetic hydrocarbon oil
Colour space	beige	beige	beige	beige
Texture	homogeneous , short fibrous	homogeneous , short fibrous	fibrous , homogeneous	fibrous , homogeneous
Service temperature, lower limit	-50 °C	-50 °C	-40 °C	-40 °C
Service temperature, upper limit	120 °C	120 °C	150 °C	150 °C
Service temperature, DIN 51825, upper limit, rolling bearing	-	-	140 °C	-
Density, Klüber method: PN 024, 20°C	approx. 0.96 g/cm³	approx. 0.96 g/cm³	approx. 0.96 g/cm³	-
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit	265 0.1 mm	265 0.1 mm	265 0.1 mm	265 0.1 mm
Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit	295 0.1 mm	295 0.1 mm	295 0.1 mm	295 0.1 mm
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, lower limit	4000 mPas	4000 mPas	5500 mPas	5500 mPas
Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s^{-1}, upper limit	8000 mPas	8000 mPas	9500 mPas	9500 mPas
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 100°C	approx. 5.9 mm²/s	approx. 5.9 mm²/s	approx. 14.5 mm²/s	approx. 14.5 mm²/s

ISOFLEX TOPAS NB 52, NB 152

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Characteristics	ISOFLEX TOPAS NB 52	ISOFLEX TOPAS NB 52 Spray	ISOFLEX TOPAS NB 152	ISOFLEX TOPAS NB 152 UV
Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 53000-1, based on standard / ASTM D445 / ASTM D7042, 40°C	approx. 30 mm²/s	approx. 30 mm²/s	approx. 100 mm²/s	approx. 100 mm²/s
Copper corrosion, DIN 51811, 24 h, 100°C	1 - 100 - 24 corrosion degree	1 - 100 - 24 corrosion degree	-	-
Copper corrosion, DIN 51811, 24 h, 120°C	-	-	1 - 120 - 24 corrosion degree	1 - 120 - 24 corrosion degree
SKF-EMCOR, DIN 51802, Klüber method: distilled water, 164 h	0 corrosion degree	0 corrosion degree	0 corrosion degree	0 corrosion degree
Oil separation, ASTM D6184, 30 h, 100°C	≤ 3 % by weight	≤ 3 % by weight	≤ 2 % by weight	≤ 2 % by weight
Dropping point, DIN ISO 22286 / IP 396	≥ 240 °C	≥ 240 °C	≥ 240 °C	≥ 240 °C
Oxidation stability, ASTM D942, 100 h, 100°C, pressure drop	≤ 0.3 bar	≤ 0.3 bar	≤ 0.3 bar	≤ 0.3 bar
Speed factor (n x dm)	approx. 1000000 mm/min	approx. 1000000 mm/min	approx. 600000 mm/min	-
Water resistance, DIN 51807-1, 3 h, 90°C	≤ 1 - 90 rating	≤ 1 - 90 rating	0 - 90 rating	0 - 90 rating
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	36 months	24 months	36 months	-

Klüber Lubrication – your global specialist

Innovative tribological solutions are our passion. Through personal contact and consultation, we help our customers to be successful worldwide, in all industries and markets. With our ambitious technical concepts and experienced, competent staff we have been fulfilling increasingly demanding requirements by manufacturing efficient high-performance lubricants for more than 95 years.

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