

# Klübersynth EM 94-102

Special synthetic grease for extreme requirements



#### Your benefits at a glance

- · Excellent corrosion and wear protection for reduced maintenance requirements and longer component life
- · Versatile multipurpose lubricant allowing product streamlining and reducing the risk of confusing lubricants
- Wide service temperature range for year-round lubrication under various climatic conditions

### Your requirements - our solution

Klübersynth EM 94-102 is a fully synthetic lubricating grease incorporating a special calcium complex soap thickener.

The thickener enables formation of a resilient lubricating film providing high resistance to mechanical-dynamic loads whilst enabling excellent wear protection.

Klübersynth EM 94-102 can be used in a multitude of applications under different climatic conditions due to its wide service temperature range. Various friction points can therefore be supplied with one single lubricant avoiding confusion with multiple lubricant selection and use.

#### **Application**

With excellent resistance to water and good corrosion protection, Klübersynth EM 94-102 is especially suitable for use in wet and humid areas. Application examples include winter sport applications like ski lifts and piste vehicles, or industrial off shore and marine applications.

The excellent wear protection, adhesion characteristics, load capacity and low-temperature behaviour of Klübersynth EM 94-102 make it suitable for a multiplicity of application uses.

### **Application notes**

Klübersynth EM 94-102 can be applied by spatula, brush or grease gun.

Ideally, all lubrication points should be cleaned and old grease be removed prior to the application of Klübersynth EM 94-102. If the friction points cannot be cleaned, we recommend replacing the existing grease by frequent relubrication purging.

#### 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      | Klübersynth EM 94-102 |
|-----------------|-----------------------|
| Cartridge 400 g | +                     |
| Can 1 kg        | +                     |
| Bucket 25 kg    | +                     |

| Characteristics          | Klübersynth EM 94-102     |
|--------------------------|---------------------------|
| Article number           | 004305                    |
| Composition, thickener   | calcium complex soap      |
| Composition, type of oil | synthetic hydrocarbon oil |
| Colour space             | brown                     |
| Texture                  | homogeneous               |



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| Characteristics   | Klübersynth EM 94-102           |
|---|---------------------------------|
| Functional lubricant film   | approx40 °C                     |
| Service temperature, lower limit  | -30 °C                          |
| Service temperature, upper limit  | 140 °C                          |
| Lubricating greases - K, DIN 51825@DIN 51502  | KPHC2H-30                       |
| Density, Klüber method: PN 024, 20°C  | approx. 0.91 g/cm <sup>3</sup>  |
| NLGI grade, DIN 51818   | 2                               |
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, lower limit   | 265 0.1 mm                      |
| Worked penetration, DIN ISO 2137 / ASTM D217, 25°C, upper limit   | 295 0.1 mm                      |
| Shear viscosity, Klüber method: PN 008@DIN 53019-1, equipment: rotational viscometer, 25°C, 300 s <sup>-1</sup>             | ≤ 7000 mPas                     |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 100°C                          | approx. 14.6 mm <sup>2</sup> /s |
| Kinematic viscosity of the base oil, DIN EN ISO 3104 / DIN 51562-1 / ASTM D445 / ASTM D7042, 40°C                           | approx. 100 mm <sup>2</sup> /s  |
| SKF-EMCOR, DIN 51802, Klüber method: distilled water, 168 h   | ≤ 1 corrosion degree            |
| Dropping point, DIN ISO 2176 / IP 396   | ≥ 250 °C                        |
| Four-ball tester, welding load, DIN 51350-4   | ≥ 3000 N                        |
| Speed factor (n x dm)   | approx. 500000 mm/min           |
| Water resistance, DIN 51807-1, 3 h, 90°C  | 0 - 90 rating                   |
| Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopene original container, approx. | ed 24 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 90 years.

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