

# Klüber Madol 900 N Series

Easily scourable, wear-protecting needle and sinker oils

#### Your benefits at a glance

- Good wear protection, hence longer service life of stitch-forming elements
- Smooth running of machines due to noise and oscillation damping properties
- Scourable with conventional washing liquors at low cost, reducing costs in wet processing
- Compatible with elastane fibres and commonly used synthetic fibres

#### Your requirements - our solution

In the knitting industry, requirements in terms of consistent product quality, compatibility of materials, wear protection and scourability are becoming more and more stringent.

With Klüber Madol 900 N oils we offer you an oil series which manufactured in consistent quality using special mineral base oils and additives.

Due to their special chemical composition, Klüber Madol 900 N oils ensure reliable wetting of the friction points in your knitting machine, keep needle grooves clean and extend the needle life.

The oils' good oxidation stability contribute to reduce wear and deposits on stitch-forming elements, thus ensuring long and trouble-free operation of knitting machines, while at the same time keeping maintenance costs to a minimum. This will contribute to reducing operating costs in the knitting mill.

Klüber Madol 915 N, 920 N and 966 N show good scourability under field conditions, with that of Klüber Madol 934 N being even better. This contributes to reducing costs in wet processing.

Klüber Madol 900 N oils are compatible with elastane fibres and commonly used synthetic fibres as well as sealing materials and plastics.

## Application

Klüber Madol 900 N oils lubricate needles, sinkers, couplings, needle cams, cylinders, dials and sinker rings in knitting machines and protect them against wear. In addition, they ensure clean needle grooves and help to extend needle and sinker life. A reduction in the operating temperature of your knitting machines is possible owing to the good anti-wear properties of the oils.

Klüber Madol 900 N oils are available in the viscosity grades ISO VG 15, 22 and 32 and can therefore be used for circular knitting machines.

## Application notes

Klüber Madol 900 N oils can be precisely metered by means of conventional oil feeders.

Please observe the machine manufacturer's viscosity recommendations.

Before changing over to Klüber Madol 900 N oils, please make sure the oil feeders are drained and the oil containers are thoroughly cleaned. Different types of needle oils should not be mixed due to their different chemical composition. Owing to the many different compositions of elastomers, paints and plastics which are used, we recommend checking their compatibility prior to series application.

We recommend our cleaning and flusing agent Klüber Silvertex R 14 to clean your machines. Monitoring of the lubrication quantity is recommended following changeover with readjustment where necessary.

As the oils change their viscosity with decreasing temperatures, we recommend heating them up before use in order to ensure trouble-free operation of the machines.

If you wish to optimise the service life of your knitting machine or have any other questions regarding your application, our experts will be pleased to help you. We look forward to hearing from you.

## 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.





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Pack sizes	Klüber Madol 915 N	Klüber Madol 920 N	Klüber Madol 934 N	Klüber Madol 966 N
Drum 200 I	+	+	+	+
Canister 20 I	+	+	+	+

Product data	Klüber Madol 915 N	Klüber Madol 920 N	Klüber Madol 934 N	Klüber Madol 966 N
Article number	035116	035119	035114	035117
Appearance	clear	clear	clear	clear
Colour space	colourless	colourless	colourless	colourless
Density, DIN 51757, 20 °C	approx. 0.87 g/ cm <sup>3</sup>	approx. 0.87 g/ cm³	approx. 0.88 g/ cm³	approx. 0.87 g/ cm³
Kinematic viscosity, DIN 51562 pt. 01/ASTM D-445/ ASTM D 7042, 40 °C	approx. 16 mm²/ s	approx. 22 mm²/ s	approx. 22 mm²/ s	approx. 32 mm <sup>2</sup> / s
Flash point, DIN EN ISO 2592, Cleveland, open-cup apparatus	>= 170 °C	>= 170 °C	>= 170 °C	>= 170 °C
Pour point, DIN ISO 3016	<= 3 °C	<= 6 °C	<= 6 °C	<= 8 °C
Minimum shelf life from the date of manufacture - in a dry, frost-free place and in the unopened original container, approx.	24 months	24 months	24 months	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 80 years.

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The data in this document is based on our general experience and knowledge at the time of publication and is intended to give information of possible applications to a reader with technical experience. It constitutes neither an assurance of product properties nor does it release the user from the obligation of performing preliminary field tests with the product selected for a specific application. All data are guide values which depend on the lubricant's composition, the intended use and the application method. The technical values of lubricants change depending on the mechanical, dynamical, chemical and thermal loads, time and pressure. These changes may affect the function of a component. We recommend contacting us to discuss your specific application. If possible we will be pleased to provide a sample for testing on request. Klüber products are continually improved. Therefore, Klüber Lubrication reserves the right to change all the technical data in this document at any time without notice.

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