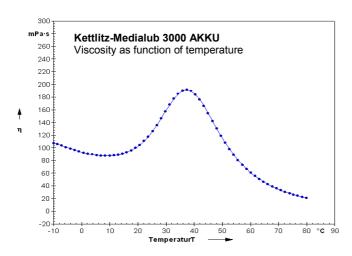


## **KETTLITZ-Medialub 3000 AKKU**

## - technical leaflet -

KETTLITZ-Medialub 3000 AKKU is a new, water-based, high-performance lubricant for chain saws and has especially been developed for battery and electrical chainsaws.

Due to the use of special additives, Medialub 3000 AKKU provides excellent lubricating properties and a unique viscosity behavior.



Unlike customary chainsaws having a combustion engine, the temperature in the lubricant tank does hardly increase for battery and electrical chainsaws. As a consequence, the viscosity of lubricants strongly increases with decreasing temperature outside; therefore, the lubricating effect on chain and bar is reduced.

In contrast, the viscosity of Medialub 3000 AKKU remains almost constant at a temperature between -10 °C and approximately 20 °C (see graph on the left).

For temperatures above 20 °C Medialub 3000 AKKU initially is getting more viscous. Therefore, for lower temperatures outside a constant lubricating performance is secured and the oil pump is spared. In addition to that a premature loss of lubricant on the chain is avoided at higher temperatures.

The advantages of Medialub 3000 AKKU are very versatile:

- The intelligent viscosity behaviour results in excellent lubricating properties at improved handling.
- Medialub 3000 AKKU is particularly environmentally friendly. The main component of the
  product is water. As a result, only a minimum amount of a so-called foreign matter is
  discharged during the loss of lubrication. Medialub 3000 AKKU does not only protect the
  environment, but also saves resources of our world.
- All raw materials used to produce the product are environmentally friendly and biodegradable.
- Impurities on the chain as well as on the bar, but also on clothes, are easily washable with water.
- Even after ageing for 1000 hours at 80 °C, no signs of resinification in a conventional manner could be observed.
- Even after a longer downtime of the electric or rechargeable saw, no increased corrosion on chain or other metal parts could be observed when using Medialub 3000 AKKU.



## Please note:

KETTLITZ-Medialub 3000 AKKU may not be mixed with synthetic or mineral oils as well as lubricants based on vegetable oil. Mixing results in technical faults!

For the first product changeover from a lubricant based on mineral or vegetable oil to Medialub 3000 AKKU the cleaning recommendations for the tank of the electric or rechargeable saw have to be considered necessarily!

Diluting with water is explicitly dissuaded!

The main ingredient of KETTLITZ-Medialub 3000 AKKU is water. At low temperatures outside (below -10 °C) the use is not recommended!

In case of tannic acid containing woods (e.g. oak) a discolouration can take place. That discolouration has no effect on the lubricating properties of the product!

In order to avoid corrosion, it is recommended not to mount the chain guard immediately after finishing the work. This may result in evaporation of water from sword and chain. Alternatively, the sword guard could be equipped with several holes in order to enable evaporation of water.

The chain guard must be mounted for transport necessarily!

## **Technical data**

Chemical characteristics chain lubricant based on water, containing additives

Appearance/delivery form transparent, brownish liquid

 Colour
 (ASTM D 1500)
 approx. 3

 Density at 15 °C
 (g/cm³)
  $1,030 \pm 0,010$  

 Refractive index  $n_0^{20}$   $1,370 \pm 0,010$  

 Viscosity at 40 °C
 (mm²/s)
  $168 \pm 10$  %

 Setting point (C°)
 DIN 51 583
 approx. -10 °C

Physiol. behaviour see safety data sheet

Storage stability 2 years under suitable storage conditions

packing cans: 1 liter, 5 liter or 20 liter

drums 60 liter or 200 liter container: 1000 Liter