

Press Release 08/13/2014

Bonderite L-MR: A New Generation of Bactericide-Free Lubricants

# "Bacteria have to stay outside"

As the leading solution provider for adhesives, sealants and functional coatings, Henkel develops tailor-made solutions for industrial customers which, thanks to innovative products, enhance both the efficiency and sustainability of the processes concerned. The lubricants employed in metalworking need to ensure that the amount of wear caused to the tools used in drilling, milling, punching, turning and grinding operations is reduced to a minimum, even under heavy-duty cutting conditions, the aim being to extend tool lifetimes to an economic maximum. With Bonderite L-MR, Henkel offers an innovative lubricant series that is both odorless and bactericide-free. Exhibiting excellent hard-water stability, these lubricants also ensure exceptionally long bath lifetimes.

Since their market launch, the emulsions marketed under the Bonderite L-MR brand have proven highly successful in industrial service at leading manufacturers of construction and agricultural machinery, not to mention renowned automobile makers and automotive component suppliers. With an innovative combination of ingredients, Henkel has succeeded in developing a range of emulsions which, at standard service concentrations, offer an exceptionally long bath lifetime, even when mixed with hard water. The formulation is bactericide-free, eliminating the need to regularly top-up the levels of toxic bactericides. The end result of the significantly longer bath lifetime available with Bonderite L-MR lubricants is reduced environmental impact combined with appreciably lower operating expenses. Cost advantages accrue to customers both because these products are very easy to regulate and because there is none of the usual expense of frequent replenishment and disposal. The Bonderite L-MR series contains a variety of lubricants with performance characteristics and ingredients aligned to specific application requirements.



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## Solution to a core problem: Achievement of long, disruption-free bath lifetimes

The long-lasting emulsion with its low foaming tendency in soft water, and high hardwater stability, solves a core problem associated with the use of water-miscible lubricants: The achievement of long bath lifetimes - even under conditions of long machine downtimes such as occur during company or works vacations. Until now, there were only two possibilities in the market available for preventing odor. The first was to use conventional bactericide-free lubricants in which bacteria growth is initially tolerated until a certain concentration is reached, and then combated through the use of bactericides. The disadvantage of this approach lies in the fact that the killed microbes provide an excellent nutrient medium for the next generation of bacteria, which means the process has to be repeated at ever shorter intervals. The second option is to use a bactericide-containing lubricant in order to suppress bacterial growth as far as possible from the outset. However, eventually the same problem occurs as with conventional bactericide-free lubricants, albeit at a later stage in the cycle. Thanks to new Bonderite L-MR, lengthy periods of standstill, such as long weekends or company/works vacations, are no longer a problem. Even layers of foreign oil floating on the emulsion can be readily dissolved without the need to resort to complicated processes such as pumped recirculation or expensive oxygen infeed.

Easy to use, high lubrication efficiency, long bath lifetimes, odor-free, low-foaming and low-consumption, stable in hard water, well tolerated, and cost-reducing, the innovative Bonderite L-MR lubricant series will be showcased at the Henkel booth at this year's "AMB – International Exhibition for Metalworking," which takes place in Stuttgart, Germany, from September 16 through September 20, 2014.

### Bonderite is a registered trademark of Henkel and/or its affiliates in Germany and elsewhere.

Henkel operates worldwide with leading brands and technologies in three business areas: Laundry & Home Care, Beauty Care and Adhesive Technologies. Founded in 1876, Henkel holds globally leading market positions both in the consumer and industrial businesses with well-known brands such as Persil, Schwarzkopf and Loctite. Henkel employs about 47,000 people and reported sales of 16.4 billion euros and adjusted operating profit of 2.5 billion euros in fiscal 2013. Henkel's preferred shares are listed in the German stock index DAX.

### Photo material is available at http://www.henkel.com/press

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### The following material is available:



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