

Technical Article

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Bonderite C-NE 6250 from Henkel

Innovative, bactericide-free neutral cleaner

A trusted partner in the service of industry for many years, Henkel also supports automobile manufacturers around the world in their efforts to constantly develop better products and make their production processes more efficient and sustainable. As the world market leader in adhesives, sealants and functional coatings, Henkel offers solutions along the entire value chain of automobile manufacturing.

High-quality and corrosion-resistant die-cast components need to pass through numerous process stages to completion. Aside from the actual casting operation, processes such as machining, component cleaning, surface treatment and final assembly all exert a critical influence on final component quality. Henkel has a range of high-performance products for each of these production stages. Its portfolio includes high-grade lubricants (Bonderite L-CA), cutting fluids (Bonderite L-MR), specialty cleaners (Bonderite C-NE), and conversion coatings, as well as an extensive array of adhesives and sealants. Offering comprehensive experience and expertise as the world market leader for adhesives, sealants and functional coatings, Henkel can ensure that each stage of the value chain is perfectly coordinated and concatenated in order to achieve maximum product potential.

The aqueous neutral cleaner series: Bonderite C-NE

Water-based cleaning solutions from Henkel represent a success story that goes back more than 80 years. Their unique combination of mild alkalinity, corrosioncombating components, surfactants, builders, and inhibitors provides for a permanently low level of foaming allied to soft and hard water stability, thus ensuring good cleaning performance and optimum corrosion protection. Depending on the plant technology involved, bath life can be extended through the addition of either emulsifying or demulsifying systems.







The cleaners that Henkel supplies under the Bonderite brand can be used after machining operations (milling, cutting, drilling, grinding). They are ideal for the removal of oils and emulsions, paint residues, metal chips and pigments from the surface of machined or extruded components as preparation for further process stages such as assembly, adhesive bonding, coating, pre-treatment priming, or storage.

Bonderite C-NE 6250 – the innovative bactericide-free cleaner

Henkel has developed the first water-based bactericide-free and salt-free neutral cleaner, suitable for low-temperature applications, which – even during replenishment – requires no bactericide addition. The new product Bonderite C-NE 6250 therefore not only simplifies production processes, it also minimizes the danger to worker health, thus facilitating successful implementation of the EU's biocide directive.

With an innovative combination of raw materials, Henkel has succeeded in formulating a new product based on the patented emulsifier technology already being used in Henkel lubricants of the Bonderite L-MR series. The new generation of cleaners is characterized in particular by the fact that, through their entire life cycle as cleaning media, they generally require no toxic or hazardous additions of bactericides. Such a thing was not possible with the classic product concepts of the past.

Bonderite C-NE 6250 undergoes exceptionally low levels of foaming in soft water, while also exhibiting high water hardness stability. This has enabled a key problem in the use of water-miscible cleaners to be resolved, leading to long bath lifetimes and thus also a reduction in both environmental impact and production cost.

Bonderite C-NE 6250 should preferably be used in spray systems with one or several cleaning zones. It is also suitable for high-pressure processes such as jet deburring. And it can likewise be employed in combined dip and spray processes without the danger of foam formation. This neutral cleaner is suitable for all iron alloys, steel, cast iron, aluminum, aluminum alloys and non-ferrous metals including copper and brass.

Benefits of Bonderite C-NE 6250 at a glance

- Simple and fast bath control
- Long bath lifetimes giving increased production time
- Up to 50 percent less wastewater for reduced disposal costs
- Up to 30 percent less product consumption
- No addition of further costly additives or bactericides necessary
- Good temporary corrosion protection for up to four weeks
- Suitable for dip and spray processes, with or without ultrasound
- Suitable for ultrafiltration with good flow performance

Henkel at Parts2Clean: Hall 5, Stand B-07

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.

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The following material is available:



Cleaning parts of a washing machine's gear by using the bactericide-free cleaner Bonderite C-NE 6250 after machining operations is used as preparation for further process stages.



Cleaning high-quality and corrosion-resistant components such as engine blocks by using Bonderite C-NE 6250 in an industrial cleaning station exert a critical influence on final component quality.