

BONDERITE® L-MR B 549

January 2024

Product description

BONDERITE® L-MR B 549 provides the following product characteristics:

Technology	Lubricant
Product type	Machining lubricants
Application	Metal machining

BONDERITE® L-MR B 549 is a bio-resistant, high oil content, semi-synthetic fluid designed for machining and grinding of ferrous and aluminum alloys. Its combination of lubricity additives and cooling ability allow it to work in light to moderate machining and grinding applications. This product has been designed where lubricity, bio-resistance, cleanliness and cooling are critical in aluminum, cast iron or steel applications.

Benefits:

- High lubricity making this product versatile in most machining and grinding applications.
- Bio-resistant technology which eliminates the need for tank-side additives and Monday morning odors.
- Excellent tramp oil rejection for easy removal and increased solution longevity.
- Less product consumption due to the superb wetting and emulsion properties.

Application areas:

Designed for use in areas where moderate water quality (100 - 300 ppm hardness) or process requirements make foam difficult to control. Excellent for heavy duty ferrous or nonferrous machining.

Technical data

Appearance	Hazy, amber fluid
Appearance @ 5%	Translucent tan fluid
Typical concentration range, %	5 -10
pH of emulsion @ typical%	9.2 - 9.4
Density, lbs/gallon)	8.3
Chlorine	No
Boron	Yes
Refractometer factor	1.5
Biosan Bacteria Challenge (Biosan SOP# 14 - 1)	Pass

Direction for use

Preliminary statement:

Prior to use it is necessary to read the **Material Safety Data Sheet** for information about precautionary measures and safety recommendations. Also, for chemical products exempt from compulsory labeling, the relevant precautions should always be observed. Please also refer to the local safety instructions and contact Henkel for analytical support.

Operating data:

Operation	Concentration
Grinding, %	6 to 7
General machining, %	6 to 8
Heavy machining, %	8 to 10

Refractometer procedure:

BONDERITE® L-MR B 549 solutions are easily checked using a standardized refractometer (see manufacturers operating instructions). Multiply the refractometer reading by 1.5 to obtain product concentration.

Titration procedure (pH method):

1. Place 15 ml sample of BONDERITE® L-MR B 549 into a 200 ml beaker flask.
2. Add deionized water to the 100 ml mark.
3. Titrate with 0.1 N Hydrochloric Acid (Titrating Solution 61) until a pH of 3.6 is achieved.
4. To determine the concentration, multiply the milliliters of HCL consumed, by 0.537.

Classification:

Please refer to the corresponding **Material Safety Data Sheets** for details on:

Hazardous Information
Transport Regulations
Safety Regulations

Storage

Protect from freezing during transit and storage.

Additional information

Disclaimer

The information provided in this Technical data sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical data sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 1