

BONDERITE S-AD 60Known as Rodine 60
July 2020**PRODUCT DESCRIPTION**

BONDERITE S-AD 60 provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Inhibitor for hydrochloric acid
Application	Hydrochloric acid
Operating Temperature	up to 40 °C
Concentration	1 to 6 g/L

BONDERITE S-AD 60 has a strong inhibiting effect in hydrochloric acid and prolongs the pickling time only insignificantly. Hydrochloric acid solution which contains BONDERITE S-AD 60 should not be heated higher than 40 °C as the efficiency of the inhibitor drops above this temperature.

Application Areas:

BONDERITE S-AD 60 is a liquid inhibitor for hydrochloric acid which is especially suited prior to enamelling, galvanizing or electroplating. It is excellently suited as an inhibitor in hydrochloric acid containing cleaning and descaling solutions as they are used in the beverage industry.

TECHNICAL DATA

Appearance	brownish liquid
Density at 20°C, DIN 51757	~1.08 g/cm ³
pH-value (20% solution):	~8.5

DIRECTIONS 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.

Bath Make-up:

For each 1000 L of bath add the needed amount carefully to the circulating system.

BONDERITE S-AD 60 0.5 to 3.0 kg (0.5 to 3.0 L)

Operating data:

Temperature: up to 40 °C
Treatment time: as required

Bath replenishing:

When the pickling bath is replenished with concentrated pickling acid the proportion of BONDERITE S-AD 60 also needs to be supplemented. For each 100 kg of concentrated pickling acid add:

BONDERITE S-AD 60 0.5 to 2.0 kg (0.5 to 2.0 L)

Classification:

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

Hazards identification
Transport information
Regulatory information

Storage:

Recommended Temperature	Storage -15 to 40°C
Shelf-life, months	36
Frost-Sensitive	yes

ADDITIONAL INFORMATION

Disclaimer

Note:

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, Resin Technology Group, Inc., 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 0.1