

BONDERITE C-IC PE-4

Known as P3-Desincrustante PE 4
February 2017

PRODUCT DESCRIPTION

BONDERITE C-IC PE-4 provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Acid Cleaner
Application	Metal Parts

BONDERITE C-IC PE-4 is a cleaning, deoxidizing agent. Its formulation allows great descaling and solubilization of organic residues and mineral salts.

The product leaves iron phosphate layer that protects metal part of subsequent attacks.

BONDERITE C-IC PE-4 is a liquid product based on acidic phosphates.

BONDERITE C-IC PE-4 is a liquid, acidic product.

Its wetting properties make the absorption of the components much easier.

Application Areas:

BONDERITE C-IC PE-4 is used to remove scale or organic/inorganic sediments, which are resistant to treatment with alkaline products. BONDERITE C-IC PE-4 can be used on all types of metal (steel, aluminum, copper and its alloys, etc.).

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.

Application:

BONDERITE C-IC PE-4 can be used in dipping, brushing or recirculation applications. It is advisable to rinse the treated parts thoroughly after application.

The concentration, depending on the circumstances, may vary from 1 to 25%.

Titration:

Take 50 mL of the solution and add 2 or 3 drops of Phenolphthalein or Methyl Orange indicator, and titrate with 0.5 N sodium hydroxide solution, until the color changes.

The consumed mL of sodium hydroxide solution multiplied by the evaluation factor will give the concentration in % of BONDERITE C-IC PE-4.

Evaluation Factor:

a) Methyl Orange indicator

Factor to find the concentration in % by weight: 0.284

Factor to find the concentration in % by volume: 0.232

b) Phenolphthalein indicator

Factor to find the concentration in % by weight: 0.142

Factor to find the concentration in % by volume: 0.116

Important:

We recommend not use BONDERITE C-IC PE-4 on galvanized or tin plated steel, it can attack these surfaces.

Advantages of BONDERITE C-IC PE-4:

BONDERITE C-IC PE-4 has great descaling and solubilization properties.

Is is a very active detergent.

It does not release fumes or odors.

It is suitable for all types of manual cleaning.

BONDERITE C-IC PE-4 is economical.

Storage:

Recommended Storage Temperature, °C -10 to 40

Shelf-life, months 30

(in unopened original packaging)

Classification:

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

Hazards identification

Transport information

Regulatory information

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 and/or registered trademarks of Henkel and its affiliates in the U.S. and elsewhere.

Reference 0.0

Henkel AG & Co. KGaA
40191 Düsseldorf, Germany
Phone: +49-211-797-0

Henkel Corporation USA
Madison Heights, MI 48071
Phone: +1-248-583-9300

Henkel (China) Co. Ltd.
201203 Shanghai, China
+86.21.2891.8000

For more information, please contact us on www.henkel.com