

Technical Data Sheet

BONDERITE C-AK 1562

Known as Ridoline 1562

July 2017

PRODUCT DESCRIPTION

BONDERITE C-AK 1562 provides the following product characteristics:

| Technology | Industrial Cleaner |
|--------------|---------------------|
| Product Type | Alkaline Cleaner |
| Application | Metal Pre-Treatment |

BONDERITE C-AK 1562 is a liquid alkaline cleaner based on borate, phosphate and silicate, to be used for steel, zinc plated steel and aluminium.

Application Areas:

BONDERITE C-AK 1562 is used in spray- and spray/immersion processes. It must be combined with a suitable cleaning booster.

TECHNICAL DATA

| Density | ~1.39 g/cm ³ |
|--------------------------------|-------------------------|
| pH-value (1% in DI water 20°C) | ~12.9 |

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:

Depending on the substrate, make-up will be done with BONDERITE C-AK 1562 A or BONDERITE C-AK 1562.

Fill the tank with warm water, start pumping and add for a volume of 1,000 L:

Zinc plated steel and aluminium:

| BONDERITE C-AK 1562 A | 6.8 to 20.3 L= 10 to 30 kg |
|-----------------------|----------------------------|
| Cleaning booster | depends on requirements |

To avoid strong etching on sensitive surfaces, max. pH-value should be 11.2 (25°C). If higher, you

have to add BONDERITE M-AD 100 to decrease pH-value.

Steel:

| BONDERITE C-AK 1562 | 7.2 to 21.6 L = 10 to 30kg |
|---------------------|----------------------------|
| Cleaning booster | depends on requirements |

Operating Data:

Adjusting the following parameters could be necessary depending on the line conditions.

Total alkalinity:

| BONDERITE C-AK 1562 A | 4.4 to 13.3 mL |
|-----------------------|----------------|
| BONDERITE C-AK 1562 | 4.6 to 13.8 mL |

Free alkalinity:

| BONDERITE C-AK 1562 A | 3.4 to 10.3 mL |
|-----------------------|----------------|
| BONDERITE C-AK 1562 | 4.0 to 12.1 mL |
| Temperature | 50 to 60°C |
| Duration of treatment | 1 to 5 min |
| Spray pressure | 0.8 to 2.0 bar |

Bath Control:

BONDERITE C-AK 1562 solution is controlled by the following analysis:

Titration of total alkalinity:

| Feed, mL | 10 mL |
|------------|---------------------------------------------|
| Titrant: | 0.1 N hydrochloric or 0.1 N sulfuric acid |
| End point: | pH 3.6 |
| Indicator: | bromecresolgreen (0.1 % alcoholic solution) |

- Cool down bath solution to room temperature and pipette 10 mL bath solution into a clean 300 mL Erlenmeyer-flask.
- Add 50 mL deionized water.
- Add 4 to 5 drops of indicator.
- Titrate the solution with 0.1 N hydrochloric or 0.1 N sulfuric acid.
- The endpoint will be shown by a colour change from



blue to yellow (pH: 3.6).

 The consumption of 0.1 N hydrochloric or 0.1 N sulfuric acid in mL is equal to the points of total alkalinity

Titration of free alkalinity:

| Feed, mL Titrant: | 10 mL 0.1 N hydrochloric or 0.1 N sulfuric acid |
|--------------------------|---------------------------------------------------------|
| End point: Indicator: | pH 8.5 phenolphthaleine (0.1% alcoholic solution) |

- Cool down bath solution to room temperature and pipette 10 mL bath solution into a clean 300 mL Erlenmeyer-flask.
- Add 50 mL deionized water.
- Add 4 to 5 drops of indicator.
- Titrate the solution with 0.1 N hydrochloric or 0.1 N sulfuric acid.
- The endpoint will be shown by a colour change from pink to colourless (pH-value: 8.5).
- The consumption of 0.1 N hydrochloric or 0.1 N sulfuric acid in mL is equal to the points of free alkalinity

Replenishing:

Replenishing is to be done with BONDERITE C-AK 1562, irrespective of the substrates to be treated. For each missing point for a volume of 1,000 L add:

| Total alkalinity | 1.6 L = 2.2kg |
|------------------|-------------------------|
| Free alkalinity | 1.8 L = 2.5kg |
| Cleaning booster | depends on requirements |

Classification:

Please refer to the corresponding Material Safety Data Sheets for details on: Hazards identification Transport information Regulatory information

Storage:

Recommended Storage Temperature Shelf-life, months

-20 to 40°C 18months

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.

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Reference 0.2