

BONDERITE C-AK 6444

Known as P3-upon 6444

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PRODUCT DESCRIPTION

BONDERITE C-AK 6444 provides the following product characteristics:

Technology	Industrial Cleaner
Product Type	Alkaline Cleaner
Application	Parts Cleaning
Concentration	20 to 100 g/L
Operating Temperature	25 to 80°C

BONDERITE C-AK 6444 is an alkaline builder-mix cleaner to be used together with a surfactant additive for steel and iron. It is composed of alkalis, phosphonates, polymers and salts of organic acids.

Change of colour is caused by raw material and has no impact on performance.

Application Areas:

Cleaning after cutting, stamping, pressing or cold forming of cast iron and steel parts, removal of concentrated and greasy contaminations as well as pigmented, fatty acid containing drawing compounds.

BONDERITE C-AK 6444 is used in spray- or immersion processes.

Due to its high stability this product can be used in hard water without the risk of precipitations.

If the parts to be cleaned are spoiled with highly viscous greases or difficult to remove oils it may be necessary to increase the cleaning temperature (50 to 80°C).

TECHNICAL DATA

Appearance	clear, yellowish liquid
Density at 20°C, DIN 51757	~1.36 g/cm ³
pH-value (1% in DI water 20°C)	~12.5

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:

Add the required amount carefully to the circulation system.

Depending on the process, it may be necessary to add surfactant.

Immersion:

BONDERITE C-AK 6444	20 to 100 g/L
BONDERITE C-AD	2 to 6 g/L
Duration of treatment	5 to 15 min
Temperature	25 to 80°C

Spray application:

BONDERITE C-AK 6444	20 to 80 g/L
BONDERITE C-AD	1 to 3 g/L
Duration of treatment	1 to 5 min
Temperature	25 to 80°C

Bath Control:

BONDERITE C-AK 6444 solution is controlled by titration of free alkalinity.

Feed, mL	100 mL
Titrant:	0.5 N hydrochloric or 0.5 N sulphuric acid
End point:	pH 8.5
Indicator:	Phenolphthalein
Titration factor (TF):	0.94

- Pipette 100 mL bath solution into a clean 300 mL Erlenmeyer-flask.
- Add 3 to 5 drops of indicator.
- Titrate the solution with 0.5 N hydrochloric or 0.5 N sulphuric acid.
- The endpoint will be shown by a colour change from pink to colourless (pH-value: 8.5).
- The added mL of 0.5 N hydrochloric or 0.5 N sulphuric acid multiplied by the factor TF 0.94 is equal to the concentration in g/L.
- Divide this by 10 to get the value in %.

Example:

$$10 \text{ mL } 0.5 \text{ N hydrochloric or } 0.5 \text{ N sulphuric acid} \times 0.94 \\ = 9.4 \text{ g/L BONDERITE C-AK 6444 (= 0.9 \%)}$$

Classification:

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

Hazards identification
Transport information
Regulatory information

Storage:

Recommended Storage Temperature, °C	0 to 40
Shelf-life, months	24months

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Reference 0.5