

SurTec® 194

Highly Alkaline Builder

Properties

- liquid
- highly alkaline concentrate
- suited for steel and iron materials
- free of silicates, cyanides and complexing agents
- can be used together with additives like SurTec 415 and SurTec 419
- for immersion cleaning (also ultrasonic cleaning) and for electrolytic cleaning

Application

Examples in combination with SurTec 415 (with or without ultrasonic):

make-up values:	<u>degreasing</u>	<u>descaling/derusting</u>
SurTec 415	1-3 %vol	3 - 7 %vol
SurTec 194	3-7 %vol	10-20 %vol
temperature:	50-80°C	60-80°C
application time:	2-20 min	5-30 min

make-up values:	<u>delacquering</u>	<u>dephosphating</u>
SurTec 415	3 - 9 %vol	3-10 %vol
SurTec 194	10-25 %vol	5-10 %vol
temperature:	60-80°C	60-80°C
application time:	according to lacquer	5-30 min

Examples in combination with SurTec 419:

make-up values:	<u>electrolytic degreasing/ derusting and descaling</u>	<u>dephosphating</u>
SurTec 419	3 - 5 %vol	5-10 %vol
SurTec 194	8-12 %vol	5-15 %vol
temperature:	room temp. up to 60°C	60-80°C
application time:	2-10 min	5-30 min

Technical Specification

(at 20°C)	Appearance	Density (g/ml)	pH-value (at 10 g/l)
SurTec 194	liquid, colourless, clear	1.512 (1.49-1.53)	approx. 12.8

Maintenance and Analysis

Analyse and adjust the concentration of SurTec 194 regularly.

Sample Preparation

Take a sample at a homogeneously mixed position. Let it cool down to room temperature. If the sample is turbid, let the turbidity settle down and decant or filter the solution.

SurTec 194 – Analysis by Titration

reagents:	1 N hydrochloric or sulfuric acid indicator: phenolphthalein
procedure:	1. Pipette 10 ml bath sample (at concentration < 15 %vol) or 5 ml bath sample (at concentration > 15 %vol) into a 250 ml Erlenmeyer flask. 2. Dilute to approx. 100 ml with deionised water. 3. Add 3 drops of indicator. 4. Titrate with 1 N acid from red to colourless.
calculation:	consumption in ml · 0.555 (at conc. < 15 %vol) = %vol SurTec 194 consumption in ml · 1.111 (at conc. > 15 %vol) = %vol SurTec 194

Ingredients

- caustic soda
- potassium hydroxide
- salts of organic acids

Stock Keeping

In order to prevent delays in the production process, per 1,000 l bath the following amount should be kept in stock:

SurTec 194 100 kg

Product Safety and Ecology

The safety instructions and the instructions for environmental protection have to be followed in order to avoid hazards for people and environment. The Material Safety Data Sheets (according to European legislation) contain explicit details for this.

The following hazard designations and classifications into water hazard classes (WHC) have to be taken into account:

<u>product</u>	<u>hazard designation</u>	<u>water hazard class</u>
SurTec 194	C - Corrosive	WHC 1

Warranty

We are responsible for our products in the context of the valid legal regulations. The warranty exclusively accesses for the delivered state of a product. Warranties and claims for damages after the subsequent treatment of our products do not exist. For details please consider our [general terms and conditions](#).

Further Information and Contact

In our forum, you can discuss topics of the surface technology:

<http://forum.SurTec.com/>

If you have any questions concerning the process, please contact your local technical department: <http://SurTec.com/International.html>

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