

# SurTec® 603

## Phosphating Agent

### Properties

- liquid
- free of surfactants
- for immersion and spray application
- suited for iron and steel

### Application

SurTec 603 is used as phosphating agent for pre-cleaned iron and steel parts. SurTec 603 can be applied in spray or immersion process.

To increase the surface quality, subsequent rinsing is necessary.

concentration: 1-3 %vol  
temperature: 40-90 °C  
application time: 0.5-10 min  
working pH-value: 4-5  
adjust the new make-up with diluted NaOH

### Technical Specification

(at 20 °C)	Appearance	Density (g/ml)	pH-value (conc.)
SurTec 603	liquid, colourless	1.375 (1.34-1.40)	2.6 (2-3)

### Maintenance and Analysis

Analyse and adjust the concentration of SurTec 603 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 603 – Analysis by Titration

reagents: 0.1 N sodium hydroxide solution  
indicator: phenolphthaleine

procedure: 1. Pipette 10 ml bath sample into a 250 ml Erlenmeyer flask.  
2. Dilute to approx. 100 ml with deionised water.  
3. Add 3 drops of indicator.  
4. Titrate with 0.1 N sodium hydroxide solution from colourless to pink.

calculation: consumption in ml · 0.18 = %vol SurTec 603

## Ingredients

- phosphates
- accelerator

## 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 603                      25 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 603	-	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>

4 May 2009/DK, OP