

SurTec® 581

Chromium-Free Passivation

for Phosphatings

Properties

- liquid product
- for post-treatment of phosphate layers before painting
- improves lacquer adhesion and corrosion protection (prevents underfilm corrosion)
- fills pores of the phosphate layer and prevents blistering of the paint
- the slightly acidic passivation has a buffering effect and stabilises the conditions on the surface

Application

SurTec 581 is applied by immersion or spray processes after phosphating and before painting.

make-up values:	1 ml/l	(0.8-1.2 ml/l)
make-up:	Dissolve SurTec 581 in deionised water portion by portion with strong agitation.	
temperature:	room temperature	(RT-55°C)
pH-value:	4.5	(4-5) if necessary, adjust with 1 % sodium hydroxide solution
application time:	30 s (minimum)	
tank material:	PP or PVC	
filtration:	not recommended	
heating:	if desired, use acid resistant heaters (stainless steel)	
cooling:	not applicable	
exhaust:	required for worker's protection	

Technical Specification

(at 20°C)	Appearance	Density (g/ml)	pH-value (at 10 g/l)
SurTec 581	liquid, colourless	1.040 (1.03-1.05)	2.4 (2-3)

Maintenance and Analysis

Check the pH-value of the passivation regularly.

Regularly discard the bath and make it up freshly, in case of high throughput at best every working day.

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 581 – Analysis by Titration

reagents: 0.1 N sodium hydroxide solution (NaOH solution)
indicator: phenolphthalein

procedure: 1. Pipette 100 ml bath sample into a 250 ml Erlenmeyer flask.
2. Add 5 drops of indicator.
3. Titrate with 0.1 N NaOH solution from colourless to red.

calculation: consumption in ml · 0.75 = ml/l SurTec 581

Ingredients

- 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 581 10 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 581	Xi - Irritant	WHC 2

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>