

SurTec® 145

Cleaner prior Phosphating

Properties

- alkaline powdery cleaner prior to zinc phosphatings
- usable for spray application
- cleaning and activating of the steel surface in one step
- works as a grain refiner for zinc phosphatings
- ensures uniform and well adherent zinc phosphate layers
- produces a high density of nucleation sites, resulting in a fine-grained crystal structure
- promotes good corrosion resistance and paint adhesion

Application

SurTec 145 is applied in spray processes prior to zinc phosphating.

make-up value: 25 g/l (20-30 g/l)

analytical value:

alkalinity: 15 Points (12.5-18.8 Points)

make-up: Dissolve SurTec 145 in water under strong agitation and mix for at least 5 min.

temperature: 60°C (55-65°C)

application time: ≥ 1 min

spray pressure: 1-2 bar

tank material: stainless steel

filtration: not recommended

heating: necessary, use stainless steel heaters

cooling: not required

exhaust: required for worker's protection

Technical Specification

(at 20°C)	Appearance	Bulk density (kg/l)	pH-value (at 10 g/l)
SurTec 145	powder, white	0.800-0.950	8-11

Maintenance and Analysis

Analyse the alkalinity regularly and keep it in the range of 12.5-18.8 Alkalinity Points by addition of SurTec 145.

Compensate evaporation losses and losses by drag-out by adding deionised water.

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.

Alkalinity – Analysis by Titration

reagents:	0.1 N hydrochloric acid indicator: phenolphthalein
procedure:	1. Pipette 10 ml bath sample into a 250 ml Erlenmeyer flask. 2. Add 5 drops of indicator. 3. Titrate with 0.1 N hydrochloric acid from red to colourless.
calculation:	consumption in ml = Alkaline Points (AP)
correction:	For each missing AP add 1.6 g/l SurTec 145.

Ingredients

- phosphates
- silicates
- carbonates
- titanium compounds
- surfactants

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 145 50 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:

<i>product</i>	<i>hazard designation</i>	<i>water hazard class</i>
SurTec 145	Xi - Irritant	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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