

# SurTec® 611 V

## Grain Refiner

for Zinc Phosphatings used in Continuous Application

### Properties

- grain refiner prior to zinc phosphating
- contains titanium complexes which are easy to disperse in water forming a stable colloidal solution
- creates 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 611 V is applied in immersion processes prior to zinc phosphating.

make-up value: 1-2 g/l

make-up: Dissolve SurTec 611 V in water under strong agitation.

temperature: room temperature up to 40°C

application time: > 30 s

pH-value: 7.0-10.0

agitation: necessary

tank material: stainless steel

filtration: not recommended

heating: if necessary to preheat bulky parts, use stainless steel heaters

cooling: not necessary

exhaust: required for worker's protection

### Technical Specification

(at 20°C)	Appearance	Bulk density (kg/l)	pH-value (at 10 g/l)
SurTec 611 V	powder, white	0.980 (0.88-0.90)	9 (8-10)

### Maintenance and Analysis

Check the pH-value regularly. If the pH is out of the desired range, add SurTec 611 V in steps of 0.1 g/l and recheck the pH-value.

In case of high throughput, it is recommended to prepare a new bath make-up once a week.

A new make-up also is recommended in case of poor grain refinement of the zinc phosphate crystals or in case of uneven crystallization.

## Ingredients

- titanium compounds

## 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 611 V                      2 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 611 V	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>

28 June 2011/DK, WT