

# SurTec® 357

## Cold Sealing Additive

### Properties

- powdery 1-component sealing product
- causes very good corrosion resistance of anodised layer
- without greenish reflection on the anodic layer, even in case of high layer thickness
- fulfils the current quality specifications (24 hours after the treatment) of:
  - dye spot test (DIN EN 12373-4)
  - loss of mass test (DIN EN 12373-7)

### Application

make-up value:	3-5 g/l
application time:	0.7-1 min/μm
temperature:	25-30°C
pH-value:	5.5-6.5 adjust with diluted acetic acid or ammonia solution
agitation:	required: with compressed air or high pressure air
tank:	polyvinylchloride (PVC) or stainless steel
heating:	required
exhaust:	required for worker's protection
filtration:	necessary:, 0.5-1 times the total bath volume per hour; pore size: 5-10 μm
hint:	The use of deionised water is required.

### Technical Specification

(at 20°C)	Appearance	Bulk density (kg/l)	pH-value (at 5 g/l)
SurTec 357	powder, green-reddish	approx. 0.600	approx. 6

### Maintenance and Analysis

Check the pH-value regularly. Analyse and adjust the concentration of SurTec 357 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 357 – Analysis by Titration

reagents:	0.01 mol/l EDTA solution (Titrplex III) conc. ammonia solution (25 %, p.a.) indicator: murexide (1 %: 1 g grinded up finely into 99 g NaCl)
procedure:	1. Pipette 10 ml bath sample into a 300 ml Erlenmeyer flask. 2. Dilute with approx. 100 ml deionised water. 3. Add 10 ml conc. ammonia solution. 4. Add a spatula tip of indicator (solution turns to yellow). 5. Stir the solution for one minute. 6. Titrate with 0.01 M EDTA solution from yellow to purple.
calculation:	consumption in ml · 0.206 = g/l SurTec 357
nominal values:	3-5 g/l SurTec 357 corresponds to: 14.6-24.3 ml/l 0.01 M EDTA solution

## Ingredients

- nickel salt
- cobalt salt
- surfactants

## Consumption and Stock Keeping

The consumption depends heavily on the drag-out. To determine the exact amounts of drag-out, see [SurTec Technical Letter 11](#).

The following value per m<sup>2</sup> can be taken as estimated average consumption:

SurTec 357                      3-5 g

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

SurTec 357                      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:

<u>product</u>	<u>hazard designation</u>	<u>water hazard class</u>
SurTec 357	T - Toxic N - Dangerous for the environment	WHC 3

## 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>

1 November 2011/DK, WT