

## Protection upgraded

# SurTec® 177

## Electrolytical Cleaner

For Iron and Nonferrous Metals

### Properties

- highly alkaline powder
- non-foaming
- cyanide-free
- with high conductivity
- for cathodic and anodic cleaning
- suited for iron, copper and its alloys

### Application

Make-up value:	6-8 %
Temperature:	20-40 °C
Application time:	1-10 min
Hint:	for some applications a pre-cleaning is necessary (e. g. with SurTec 151)

### Maintenance and Analysis

Analyse and adjust the concentration of SurTec 177 regularly.

#### Sample Preparation

Take a bath sample at a homogeneously mixed position and let it cool down to room temperature. If the sample is turbid, let the turbidity settle and decant or filter the solution.

#### SurTec 177 - Analysis by Titration

Reagents: 1 mol/l hydrochloric acid (= 1 N) or 0.5 mol/l sulfuric acid (= 1 N)  
indicator: methyl orange solution (0.04 %)

Procedure:

1. Pipette 10 ml bath sample into a 250 ml Erlenmeyer flask.
2. Dilute with deionised water to approx. 100 ml.
3. Add about 3-4 drops of indicator.
4. Titrate with 1 N acid from yellow to orange/red (pH 4.0).

Calculation: acid consumption in ml · 0.52 = % SurTec 177

## Technical Specification

(at 20°C)	Appearance	Bulk density (kg/l)	pH-value (at 10 g/l)
SurTec 177	powder, white	approx. 0.960	approx. 13

## Ingredients

- silicates
- sodium hydroxide
- carbonates

## 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 177      50 kg

## Product Safety and Ecology

Classification and designation are noted in the **Material Safety Data Sheets** (according to the European legislation). The safety instructions and the instructions for environmental protection have to be followed in order to avoid hazards for people and environment. Please pay attention to the explicit details in our Material Safety Data Sheets.

## 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 further processing of our products do not exist. For details, please find our country-specific **General Terms and Conditions** for downloading on our homepage or ask your regional SurTec representative.

## Further Information and Contact

If you have any questions concerning the process, please contact your local technical department.

For further information and contact details, please visit our homepage:

<http://www.SurTec.com>

20 June 2017