

SurTec® 412

Neutral Activator

Properties

- liquid
- removes rust and oxidic films at neutral pH-value
- especially suitable for treatment after thermal deburring
- cleaning and derusting in one work step
- used for ultrasonic immersion application
- suited for all iron and steel materials
- compatible with aluminium
- highly concentrated
- free of hard complexing agents

Application

SurTec 412 is used for ultrasonic immersion application.

make-up value: 20 %vol

temperature: 30-60°C

application time: 1-30 min

pH-range: 5.5-7.5

In order to protect the very active surface after the derusting process against new rust, the addition of a corrosion protection additive (e.g. SurTec 531 or SurTec 533) to the final rinse is recommended.

Maintenance and Analysis

Analyse and adjust the concentration of SurTec 412 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 412 – Analysis by Titration

reagents: 0.1 N hydrochloric or sulfuric acid
indicator: bromophenol blue (0.1 g in 100 ml 20 % ethanol)

procedure: 1. Pipette 5 ml bath sample into a 250 ml Erlenmeyer flask.
2. Dilute to approx. 100 ml with deionised water.
3. Add 3 drops of indicator.
4. Titrate with 0.1 N acid from blue to turquoise/green.

calculation: consumption in ml · 2.15 = %vol SurTec 412

Technical Specification

(at 20°C)	Appearance	Density (g/ml)	pH-value (at 20 g/l)
SurTec 412	liquid, orange-brown	1.204 (1.18-1.22)	6.4 (5.4-7.4)

Ingredients

- salts of organic acids
- non-ionic 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 412	200 kg
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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 412	-	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>