

SurTec® 476

Pickling and Derusting Agent

Properties

- liquid
- based on phosphoric acid
- free of surfactants
- suitable for stainless steel, brass, red brass, plastics
- steel, aluminium and zinc will be attacked

Application

SurTec 476 can be applied in soak and spray applications, combined with a suitable surfactant from the SurTec range (e.g. SurTec 089 for soak application, SurTec 086 for spray application).

make-up value:	1-10 %vol (+ 0.1-1 %vol surfactant)
temperature:	40-80°C
application time:	1-60 min (according to demands)
tank material:	steel with rubber coating or stainless steel

Maintenance and Analysis

Analyse and adjust the concentration of SurTec 476 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 476 – Analysis by Titration

reagents:	1 N sodium hydroxide solution indicator bromophenol blue (0.1 % in 20 % ethanol)
procedure:	<i>a) concentration up to 5 %vol:</i> <ol style="list-style-type: none">1. Pipette 50 ml bath sample into a 250 ml Erlenmeyer flask.2. Add approx. 100 ml deionised water.3. Add 3 drops of indicator.4. Titrate with 1 N sodium hydroxide solution from yellow to violet. <i>b) concentration 5-10 %vol:</i> <ol style="list-style-type: none">1. Pipette 20 ml into a 250 ml Erlenmeyer flask and dilute to 50 ml with deionised water.2. Then start the same procedure as described for a).
calculation:	a) consumption in ml · 0.178 = %vol SurTec 476 b) consumption in ml · 0.445 = %vol SurTec 476

Technical Specification

(at 20°C)	Appearance	Density (g/ml)	pH- value (at 10 g/l)
SurTec 476	liquid, colourless to pale yellow - brown	1.577 (1.56-1.60)	1-3

Ingredients

- phosphoric acid
- salts of organic acids

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 476 90 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 476	C - Corrosive	WHC 1

To neutralize 100 l of SurTec 476, 1.14 l of technical NaOH (45 %) are needed.

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>