

# SurTec® 490

## Mild Acid Pickling Cleaner

### Properties

- acidic liquid
- suitable for degreasing, deoxidising and pickling of aluminium
- ideal pretreatment of aluminium before lacquering and powder coating
- free of hydrofluoric acid, nitric acid, phosphoric acid and sulfuric acid
- suitable for immersion and spray application

### Application

	<i>immersion</i>	<i>spray</i>
make-up value:	30-60 g/l	30-60 g/l
application time:	3-5 min (180-300 s)	1-3 min (60-180 s)
temperature:	20-40°C	40°C
tank material:	acid-resistant plastic tanks of GRP, steel tanks with corresponding lining or V4A stainless steel tanks (alloy 1.4571)	
heating:	recommended, made of acid-resistant material	
exhaust:	required for worker's protection	
hint:	If treating very greasy parts, it is recommended to add 0.3-1 g/l SurTec 084 additionally.	

### Technical Specification

(at 20°C)	Appearance	Density (g/ml)	pH-value (conc.)
SurTec 490	liquid, colourless, clear	1.160 (1.14-1.18)	approx. 1

### Maintenance and Analysis

While production the active substances will be consumed constantly by drag-out of bath liquid and by contamination. Therefore analyse and adjust the concentration of SurTec 490 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 490 – Analysis by Titration

reagents:	0.1 mol/l caustic soda solution (= 0.1 N NaOH solution) indicator: bromophenol blue
procedure:	1. Pipette 10 ml bath sample into a 250 ml Erlenmeyer flask. 2. Dilute to approx. 100 ml with deionised water. 3. Add some drops of the indicator solution (yellow colouration). 4. Titrate with 0.1 mol/l caustic soda solution from yellow to blue.
calculation:	consumption in ml · 2.8 = g/l SurTec 490
nominal values:	30-60 g/l SurTec 490 is equivalent to: 10.7-21.4 ml 0.1 mol/l caustic soda solution

## Ingredients

- fluoride containing acid
- organic acid
- surfactant

## 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 values per m<sup>2</sup> for immersion and spray application can be taken as estimated average consumption:

SurTec 490                      5-15 g

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

SurTec 490                      50-75 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 490	C - Corrosive	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>

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