

# P3-stabicip® OXI

**Description:** Liquid, slightly acidic cleaning booster, based on active oxygen for alkaline cleaning solutions in the food industry

**Product strengths:**

- environmentally-oriented alternative to chlorine products
- readily biodegradable
- quick and careful removal of tenacious soils
- excellent soil dispersion
- excellent foam-inhibiting properties > 40 °C
- phosphate- and nitrogen-free

## Properties

<b>Concentrate</b>	<b>Appearance:</b>	clear, colourless liquid *	
	<b>Storage stability:</b>	-10 to 40 °C	
	<b>Solubility:</b>	at 20 °C miscible with water in any proportion	
	<b>Density:</b>	1.08 - 1.12 g/cm <sup>3</sup> (20 °C)	
	<b>P content:</b>	0.18 %	
	<b>N content:</b>	0.00 %	
	<b>COD:</b>	0 mg O <sub>2</sub> /l <sup>1)</sup>	
	<b>Flash point:</b>	not applicable	
	<b>Application solution</b>	<b>pH:</b>	2.9 - 3.3 (1 %, 20 °C, deionized water) *
		<b>Conductivity:</b>	0.3 mS/cm (1 %, 20 °C, deionized water)
<b>Titration:</b>		30 - 34 % H <sub>2</sub> O <sub>2</sub> *	
<b>Foam characteristics:</b>		non foaming > 40 °C, suitable for CIP-systems	

\* Parameters subject to incoming goods control

1) Calculated value. The product is providing oxygen from itself. A practical detection is not possible.

**Material compatibility:** **P3-stabicip OXI** is, under the application conditions described below, compatible with

- **Metals** steel, chrome nickel steel
- **Plastics** all oxidation-resistant plastics, e. g. PE
- **Seals** all oxidation-resistant seals, e. g. Viton, EPDM

## Application

**P3-stabicip OXI** is a product based on active oxygen as well as on foam-inhibiting cleaning boosters and water hardness stabilizers.

### INDICATION!

**P3-stabicip OXI** is not intended to be used in closed systems as the release of oxygen will cause a pressure increase.

Addition of **P3-stabicip OXI** immediately before cleaning performance. Exceeding 45 °C, **P3-stabicip OXI** evolves its full efficacy by releasing oxygen. To achieve optimum results continuously, interval dosage is recommended.

For each cleaning procedure, it is advised to introduce **P3-stabicip OXI** into the CIP-cycle on the pressure side by means of an injection valve.

### Breweries:

- **Brewhouse/  
cold store**

#### **Coppers, whirlpool, plate cooler**

Concentration: 0.2 - 0.7 %  
NaOH: 3.0 - 4.0 % \*  
Temperature: 70 - 80 °C  
Contact time: 30 - 50 minutes

- **Filter/bright beer  
tank cellar**

#### **Pipes, filters, yeast tanks**

Concentration: 0.3 - 0.5 %  
NaOH: 2.0 % \*  
Temperature: 70 - 80 °C  
Contact time: 20 minutes

- **Bottles/cask  
cellar**

#### **Plate heater, kegs, casks**

Concentration: 0.2 - 0.4 %  
NaOH: 0.5 - 1.5 %  
Temperature: 70 - 80 °C  
Contact time: 20 minutes, i. e. according to  
tact frequency

\*) Possible addition of P3-stabilon PC to support cleaning performance!

### Fruit-juice industry:

- **Fruit squeezers**  
Concentration: 1 - 2 %  
NaOH: 2.0 %  
Temperature: 70 - 80 °C  
Contact time: 30 - 60 minutes

### Dairies:

- **Plate pasteurizer, homogeniser, separator, heater, piping systems with stubborn solids as cocoa residues, burned proteins etc.**  
Concentration: 0.5 %  
NaOH: 3.0 %  
Temperature: 70 - 80 °C  
Contact time: 30 minutes

Final rinse with water of drinking water quality, ensuring all soil and product residues are completely removed.

## Monitoring

### Concentration determination hydrogen peroxide

- **Titration**  
100 ml application solution (20 °C) to be alloyed with 25 ml sulfuric acid (25 %), titration to slightly pink with 0.1 n potassium permanganat.

Volume added potassium permanganat (ml) x 0.0017  
= % hydrogen peroxide (by wt. %)

If the hydrogen peroxide content is determined during alkaline cleaning with **P3-stabicip OXI**, titration is only reasonable immediately after sampling.

Deviations, resulting from the speed of oxygen release, may occur.

### Concentration determination caustic soda solution in presence of P3-stabicip OXI

- **Titration**  
50 ml application solution to be alloyed with a spatula tip of crystalline sodium thiosulphate (indicator protection), titration to colourless by 3 - 5 drops of phenolphthalein with 0.5 n HCl.

Volume added 0.5 n HCl (ml) x 0.04  
= % caustic soda (by wt. %)

### Concentration control

The addition of **P3-stabicip OXI** is regulated volume-proportional to the caustic soda solution in CIP-plants. We recommend the use of **P3-Elados EMP** diaphragm pumps for metering.

Our P3-System brochures are available on request.

## Safety

The relevant hazard identifications as well as risk and safety phrases are given in the EC Safety Data Sheet. We recommend our safety concept "safety first" as an aid to training your employees in how to handle cleaning agents and disinfectants safely. Please contact your Ecolab representative who can advise further.

### Important indications:

1. Do not apply in concentrate
2. Avoid any concentrate contact with organic substances (grease, oil, rubber, paper, straw, wood, cork, common soils) and other concentrated cleaning and disinfecting agents, especially alkalis
3. Avoid direct exposure to sunlight
4. Cold storage - not exceeding 40 °C
5. Storage only in delivery containers or in suitable concentrate tanks; dosage to be regulated directly from the storage vessel
6. Do not use rubber hoses when transfusing or pumping the product and always take care of clean vessels
7. If a concentrate store is existing, the respective vessel should be provided with a ventilation device, which prevents the penetration of soils
8. Do not use or store in closed systems - sufficient pressure equalization has to be maintained

The statements, information and data presented herein are believed to be accurate and reliable. The information describes the characteristic features of **P3-stabicip OXI** in ordinary use but can not be taken as a guarantee, express warranty or implied warranty for the suitability for a particular purpose and shall not extend mandatory warranty rights (if any). The specifications and performance may vary subject to the operational conditions. Since numerous parameters will influence product performance and applicability, this information does not exonerate the user from liability with respect to the suitability of the product and the appropriate safety measures to be taken. Moreover, a possible infringement of patent rights must be avoided at all times.

(Version June 2013)