LIFE SCIENCES

COSA® PUR 84

Description

Liquid additive for alkaline cleaning solutions for the pharmaceutical and cosmetic industry

Characteristics

- excellent removal of inorganic and organic deposits
- high soil-suspending power

Subject to incoming goods control

	Appearance:	**clear, yellow to brownish liquid**
	Density:	**1.19 - 1.23 g/cm³**
	Titration:	**26.6-29.4% (EDTA Titration see "Monitoring"**
	pH:	**8.5 - 9.5 (20 °C, concentrate)**

Properties

Concentrate	**Storage stability:**	5 - 35 °C
	P content:	0.1 %
	N content:	2.7 %
	COD:	554 - 594 mg O_2/g
	Flash point:	not applicable
Application solution	**Foam characteristics:**	non foaming > 40 °C, suitable for CIP-systems

Material compatibility: **COSA PUR 84** is, under the application described below and in combination with a 1 - 2 % alkaline cleaning solution compatible with

- **Metals** austenitic CrNi steels (quality at least DIN 1.4301 = AISI 304)
- **Plastics** PE, PP, PVC and Teflon

Application

COSA PUR 84 is an additive to alkaline cleaning solutions and especially suitable for the removal of pigments in the pharmaceutical and cosmetic industry.

Mode of application

General CIP application (Homogenizers, pipelines, tanks, etc)

Concentration:	1.0 - 2.0 % COSA CIP solution 0.5 - 1.0 % **COSA PUR 84**
Temperature:	45 - 95 °C (ideally 60 – 80°C) if added to COSA CIP 5 – 95°C if solely used
Contact time:	depending on degree and the type of soiling

Concentration, temperature and cleaning time can be optimized by evaluation of respective cleaning trials.

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

Monitoring

Concentration determination

- **Titration**

Determination of **Cosa PUR 84** in alkaline cleaning solutions**:**

Reagents required:

2 n acetic acid
0.01 n copper sulphate solution:
2.5 g $CuSO_4$ x 5 H_2O are dissolved in 1000 ml distilled water
Phenolphthalein
PAN indicator: 0.1 % methanol

Determination:

Approx. 200 ml of the alkaline cleaning solution are mixed and filtered with a spatula tip of activated carbon. 50 ml of the filtered solution are titrated with 2n acetic acid against phenolphthalein to colourless.

Volume added 2 n acetic acid x 0.16 = % caustic soda

In a second step, 50 ml of the alkaline cleaning solution and additional 5 ml of 2 n acetic acid without phenolphthalein are added. Titration with 0.1 m copper sulphate solution against the PAN indicator from yellow to salmon pink.

Calculation:

Volume added in ml 0.01m $CuSO_4$ x 0.030
= % **COSA PUR 84**

Concentration control

The dosage of **COSA PUR 84** can be performed volume- or time-proportional (e.g. by means of **Ecolab Elados EMP**-dosage pumps).

Safety

The relevant hazards identifications of **COSA PUR 84** are given in the EC Safety Data Sheet. If any questions arise in this context please contact your Ecolab representative.

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