

COSA™ PUR 84

Liquid additive

Pigment removal additive for alkaline cleaning solutions

Why COSA PUR 84?

Effective

COSA PUR 84 is a mild alkaline, surfactant and complexing agent containing additives for removal of pigments, inorganic and organic deposits and residues, in pharmaceutical processing equipment. When used as an additive, it improves the complexing character of the product.

Efficient

This product provides excellent removal of inorganic and organic deposits and has high soil-suspending power too. It is designed for single use and provides the best pigment cleaning results at a low concentration and low temperature.

Quality assurance

COSA PUR 84 is supported by a complete validation package including techniques for determining acceptable residual levels and analytical methods for residue quantitation.



Documentation package

- ▶ Certificates of Analysis (CoA)
- ▶ Analytical Method Descriptions Residue Analysis
- ▶ Ecological Assessment (EA)
- ▶ Toxicological and Limit Setting Information (PDE)
- ▶ Safety Data Sheet (SDS)

Subject to incoming goods control

Appearance	Clear, yellow to brownish liquid	pH	8.5 - 9.5 (20°C, concentrate)
Titration	26.6 - 29.4% (EDTA Titration see "Monitoring")	Density	1.19 - 1.23 g/cm ³

Properties

Concentrate	Storage stability	5 - 35°C
	Frost resistance	Short time of frost is possible, product has to be homogenised after thawing
	TOC	18.17%
Application solution	Foam behaviour	Non foaming > 40°C
	Rinse behaviour	Following an alkaline cleaning step, all equipment should be rinsed thoroughly to remove all residues. Rinse water should be of minimum drinking water quality and preferably cold.
	Water quality	Minimum drinking water quality
Material compatibility	Metals	COSA PUR 84 is, under the application described below, compatible with: Austenitic CrNi steels (quality at least DIN 1.4301 = AISI 304)
	Plastics	COSA PUR 84 is, under the application described below, compatible with: PE, PP, PVC and PTFE

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Application

Mode of application	COSA PUR 84 is an additive to alkaline cleaning solutions and especially suitable for the removal of pigments in the pharmaceutical and cosmetic industries. General CIP application (homogenisers, pipelines, tanks, etc) Concentration: 1.0 - 2.0% COSA CIP solution, 0.5 - 1.0% COSA PUR 84 Temperature range: 45 - 95°C (ideally 60 – 80°C) Contact time: depending on degree and the type of soiling Final rinse with water of minimum drinking water quality, ensuring all product residues are removed. COSA PUR 84 is most effectively rinsed at temperatures below +40°C.
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Monitoring

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 $\text{CuSO}_4 \times 5 \text{H}_2\text{O}$ are dissolved in 1000 ml distilled water, Phenolphthalein PAN indicator: 0.1% methanol Determination: Approx. 200 ml of the alkaline cleaning solution is mixed and filtered with a spatula tip of activated carbon. 50 ml of the filtered solution is titrated with 2 n acetic acid against phenolphthalein to colourless.	Volume added 2 n acetic acid $\times 0.16 = \% \text{ caustic soda}$ 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 0.01 m $\text{CuSO}_4 \times 0.030 = \% \text{ COSA PUR 84}$
Concentration control	The dosage of COSA PUR 84 can be performed volume-proportional or time-proportional (e.g. by means of Ecolab Elados EMP dosage pumps)	

Ecological evaluation

Evaluation	Phosphate-free
P-content	0.1%
N-content	2.7%
COD	554 - 594 mg O_2/g
The complete ecological evaluation is available on the cleaning validation website www.ecolab-cleaning-validation.com	

Safety

The relevant hazard identifications of COSA PUR 84 are given in the Safety Data Sheet available at safetydata.ecolab.eu. If any questions arise in this context please contact your Ecolab representative.

A Toxicological Hazard Assessment is also available on the cleaning validation website www.ecolab-cleaning-validation.com

For product ordering information, please contact your Ecolab Account Manager or email infoLS@ecolab.com

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