

COSA[®] CIP 92

Description

Liquid, alkaline, surfactant-containing detergent for the pharmaceutical and cosmetic industry

Characteristics

- suitable for CIP-systems
- excellent removal of organic soil
- high soil-suspending power

Subject to incoming goods control

Appearance: clear, yellowish liquid

Refraction index n_D^{20} : 1.3922 - 1.3982

Titration:

Use solution: 100 ml (1 % solution)

Titrant: 0.1 mol/l Hydrochloric Acid (HCl)

Endpoint: pH-value = 8.3

Consumption: 11.5 – 12.5 ml

% Alkalinity (expressed as Na₂O):

% Alkalinity as Na₂O =

$\frac{(\text{ml HCl to pH 8.3}) \cdot (0.1 \text{ mol/l}) \cdot (31) \cdot (100)}{\text{Sample weight [g]} (1000)}$

Sample weight [g] (1000)

% Alkalinity (expressed as Na₂O): 3.565 - 3.875 %

Properties

Concentrate

Storage stability: 0 - 40 °C

Density: 1.06 - 1.10 g/cm³

P content: 0.17 %

N content: 0.66 %

COD: 745 - 785 mg O₂/g

Flash point: not applicable

Application solution	pH:	11.5 - 12.5 (1 %, 20 °C, deionized water)
	Conductivity:	3.08 ms/cm (1 %, 20 °C, deionized water)
	Foam characteristics:	non foaming > 50 °C, suitable for CIP-systems

Material compatibility: **COSA® CIP 92** is, under the application described below, compatible with

- **Metals** steel, austenitic CrNi steels (quality at least DIN 1.4301 = AISE 304)
- **Plastics** PE, PP, PVC, teflon

Application

COSA® CIP 92 is suitable for the removal of organic soil like emulsions, strong fatty formulations and gellen in the pharmaceutical/cosmetic industry.

Mode of application

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

Concentration:	1 - 3 %
Temperature:	45 - 95 °C (circulating manner)
Contact time:	depending on degree and kind of soiling

Before switching on the spray devices, it is recommended to heat up the solution to > 50 °C to prevent the formation of foam. 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**

Receiving flask:	100 ml application solution
Titration solution:	n/2 hydrochloric acid (HCl)
Indicator:	Phenolphthalein
Titration factor:	0.43

Volume added in ml x 0.43 = % **COSA® CIP 92**

- **Conductivity** Specific conductivity of **COSA® CIP 92**
(please refer to the attached table)

Concentration control

The dosage of **COSA® CIP 92** can be carried out volume-proportional to the water flow cyclic and conductivity-controlled.

We recommend the use of **Elados-EMP**-diaphragms pumps for metering and for control and phase separation of the **COSA® CIP 92**-solution the use of **LMIT 09** inductive conductivity meters.

Safety

The relevant Hazards identifications of **COSA CIP 92** are given in the EC Safety Data Sheet. If any questions arise in this context please contact your Ecolab representative.

The statements, information and data presented herein are believed to be accurate and reliable. The information describes the characteristic features of **COSA CIP 92** in ordinary use but cannot 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.

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Specific Conductivity (20 °C, 0 °d)
Temperature coefficient: α 2.15 %/°C

