

COSA™ CIP 92

Non-Chlorinated Alkaline Cleaner

Liquid, alkaline cleaner for the removal of emulsion and fat containing residues

Why COSA CIP 92?

Effective

COSA CIP 92 is a liquid, alkaline cleaner containing surfactants for cleaning in the pharmaceutical and personal care industries. It provides excellent removal of organic soils such as fat, oil, oil-in-water emulsions and water-in-oil emulsions.

Quality assurance

Due to its powerful blend of surfactants, sequestrants, and alkaline agents, COSA CIP 92 has a broad cleaning ability. It is also suitable for cleaning Carbopol® and similar polymeric materials.

COSA CIP 92 is provided with 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, yellowish liquid	Refractive 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 $\% \text{ Alkalinity as Na}_2\text{O} = \frac{(\text{ml HCl to pH 8.3}) \times (0.1 \text{ mol/l}) \times (31) \times (100)}{\text{Sample weight [g]} \times (1000)}$ % Alkalinity (expressed as Na₂O): 3.565 - 3.875%		

Properties

Concentrate	Storage stability	0 - 40°C
	Frost resistance	Short time of frost is possible, product has to be homogenised after thawing
	Density	1.06 - 1.10 g/cm ³
	TOC	18.15%
Application solution	pH	11.5 - 12.5 (1%, 20°C, deionised water)
	Conductivity	3.08 mS/cm (1%, 20°C, deionised water)
	Foam behaviour	Non-foaming > 50°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.
Material compatibility	Water quality	Minimum water drinking quality
	Metals	COSA CIP 92 is, under the application described below, compatible with: Steel, austenitic CrNi steels (quality at least DIN 1.4301 = AISE 304)
	Plastics	COSA CIP 92 is, under the application described below, compatible with: PE, PP, PVC, PTFE

COSA™ CIP 92

Application

Mode of application

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

Concentration: 1 - 4% **Temperature:** 45 - 95°C (circulating manner)

Contact time: depending on degree and nature 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 optimised by evaluation of respective cleaning trials.

Final rinse with water of minimum drinking water quality, ensuring all product residues are removed. COSA CIP 92 is most effectively rinsed at temperatures below +40°C.

Monitoring

Titration

Receiving flask: 100 ml application solution
Endpoint: phenolphthalein

Titration solution: n/2 hydrochloric acid (HCl)

Titration factor: volume added in ml x 0.43 = % COSA CIP 92

Conductivity

Specific conductivity of COSA CIP 92 (see graph below)

Concentration control

In practice, it is suitable to determine the concentration of COSA CIP 92 by measuring the volume of the dosing pump and calculating the concentration or by controlling the conductivity (e.g. by means of Ecolab Elados EMP-dosage pumps and inductive conductivity measuring devices Ecolab LMIT 09)

Ecological evaluation

Evaluation

- Very well biodegradable
- Phosphate-free
- Consider maximum permissible limits for pH values

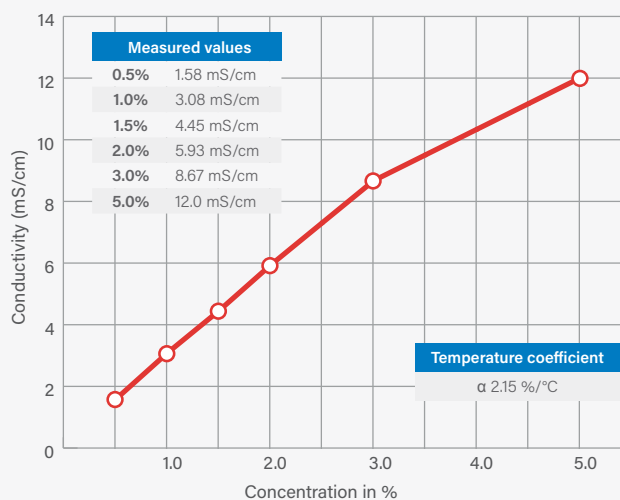
P-content 0.17%

N-content 0.66%

COD 745 - 785 mg O₂/g

The complete ecological evaluation is available on the cleaning validation website www.ecolab-cleaning-validation.com

Specific conductivity (20°C, 0 °dH)



Safety

The relevant hazard identifications of COSA CIP 92 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

WORLDWIDE HEADQUARTERS

1 Ecolab Place
St. Paul, MN 55102
USA

www.ecolab.com/lifesciences

EUROPE HEADQUARTERS

Richtistr. 7
8304 Wallisellen
Switzerland

www.ecolablifesciences.com

