

COSA[®] CIP 72

Description

Liquid, acid detergent for the removal of inorganic soil in the pharmaceutical, Biotech and cosmetic industry

Characteristics

- phosphorous-free
- based on organic acids
- suitable for CIP-systems
- surfactant-free

Subject to incoming goods control

Appearance: clear, colourless liquid

Titration:

Use solution: 50 ml (1 % solution)

Titrant: 1.0 mol/l Sodiumhydroxide (NaOH)

Endpoint: pH-value = 8.3

Consumption: 4.0 – 4.4 ml

% Acidity (expressed as Formic Acid):

% Acidity as HCOOH =

$$\frac{(\text{ml NaOH to pH 8.3}) \cdot (1 \text{ mol/l}) \cdot (46) \cdot (100)}{\text{Sample weight [g]} (1000)}$$

Sample weight [g] (1000)

Acidity (expressed as HCOOH): 36.80 - 40.48%

Properties

Concentrate

Storage stability: 0 - 45 °C

Density: 1.19 - 1.23 g/cm³

P- content: 0.00 %

N- content: 0.00 %

COD: 320 - 360 mg O₂/g

Flash point: not applicable

Application solution	<p>pH: 2.2 - 2.6 (1 %, 20 °C, deionized water)</p> <p>Foam characteristics: non foaming, suitable for CIP-systems</p>
Material compatibility:	<p>COSA® CIP 72 is, under the application described below, compatible with</p> <ul style="list-style-type: none"> • Metals austenitic CrNi steels (quality at least DIN 1.4301 = AISI 304) • Plastics and Seals Due to the wide range of different plastics and seals, the suitability should be tested as required
<i>Application</i>	<p>COSA CIP 72 is suitable for the removal of inorganic soilings in homogenizers, tanks, pipelines as well as fermenters and similar equipment in the pharmaceutical, Biotech and cosmetic industry.</p>
Mode of application	<p>Rinse with water after draining off the alkaline cleaning solution.</p> <p>Acid cleaning with COSA CIP 72 solution</p> <p>Concentration: 1 - 3 % COSA CIP 72 Temperature: 5 - 60 °C (ideally 50 – 60°C) Contact time: 5 - 15 minutes</p> <p>Concentration, temperature and cleaning time can be optimized by evaluation of respective cleaning trials.</p> <p>Acid foam cleaning (using a double injector)</p> <p>Concentration: 1.0 - 1.5 % COSA CIP 72 0.5 - 1.0 % COSA FOAM 40 Contact time: 10 - 20 minutes</p> <p>Final rinse with water of minimum drinking water quality, ensuring all soil and product residues are removed.</p>
Indication!	<p>When changing over from nitric-acid based products to COSA CIP 72, an intermixture of the concentrates must be avoided!</p>

Monitoring

Concentration determination

- **Titration**

Receiving flask:	50 ml application solution
Titration solution:	1 n sodium hydroxide solution (NaOH)
Indicator:	Phenolphthalein
Titration factor:	0.24

Volume added in ml x 0.24 = % **COSA CIP 72**

Dosing control

The dosage of **COSA CIP 72** can be performed volume- or time-proportional (e. g. by means of **Elados EMP-** dosage pumps).

Safety

The relevant Hazards identifications of **COSA CIP 72** 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 72** 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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