

Trimeta CD

Description: Acid one-phase cleaning and disinfecting product for the brewing industry

Product strengths:

- microbiological efficacy against beverage specific micro-organisms
- very good cleaning effect
- free of phosphorous
- suitable for stainless steel and Munkadur tanks

Properties

Concentrate	Appearance:	Clear, colourless to yellow liquid *
	Storage stability:	5 - 40 °C
	Solubility:	at 20 °C miscible with water in any proportion
	Density (20°C):	1.17 - 1.21 g/cm ³ *
	P content:	0.0 %
	N content:	1.7 %
	COD:	205 mg O ₂ /g
	Flash point:	not applicable
Application solution	pH:	1.7 - 2.1 (1 %, 20 °C, deionized water)
	Conductivity:	12.3 mS/cm (1 %, 20 °C, deionized water)
	Foam characteristics:	Non foaming, suitable for CIP-systems

* Parameters subject to incoming goods control

Material compatibility:

Trimeta CD is, in concentrate and under the application conditions described below, compatible with

- **Metals**

for concentrate: austenitic CrNi steels (quality at least DIN 1.4301 = AISI 304)

for use solution: austenitic CrNi steels (quality at least DIN 1.4301 = AISI 304), aluminium

- **Plastics**

for concentrate: PE, PP, PTFE, rigid PVC and other acid-resistant plastics

for use solution: PE, PP, PTFE, rigid PVC, epoxid-coat (Munkadur) and other acid-resistant plastics

- **Seals**

for concentrate: Viton B, Silicon

for use solution: Viton B, FFKM, Silicon, NBR, EPDM

In view of the wide range of different seals, it is **advisable to test their suitability in case of need.**

For plastics and seals: The suitability of higher concentrations and/or other plastics should be tested in case of need.

Microbiology

EN 1276 Bactericidal Efficacy				
Pass criteria	Test organisms	Temperature	Clean conditions (0.03% BSA)	Dirty Conditions (0.3% BSA)
>5 log reduction	Bacteria - <i>Staphylococcus aureus</i> (DSMZ 799) - <i>Pseudomonas aeruginosa</i> (DSMZ 939) - <i>Escherichia coli</i> (DSMZ 682) - <i>Enterococcus hirae</i> (DSMZ 3320) Additional bacteria - <i>Lactobacillus brevis</i> (DSMZ 6235)	4°C	1.5% 30min.	1.5% 30min.
	Bacteria - <i>Staphylococcus aureus</i> (DSMZ 799) - <i>Pseudomonas aeruginosa</i> (DSMZ 939) - <i>Escherichia coli</i> (DSMZ 682) - <i>Enterococcus hirae</i> (DSMZ 3320)	20°C	0.5% 5min.	1.5% 5min
	Bacteria - <i>Staphylococcus aureus</i> (DSMZ 799) - <i>Pseudomonas aeruginosa</i> (DSMZ 939) - <i>Escherichia coli</i> (DSMZ 682) - <i>Enterococcus hirae</i> (DSMZ 3320) Additional bacteria - <i>Enterococcus faecium</i> (DSMZ 20477)	40°C	-	0.7% 5min.

EN 1650 Yeasticidal efficacy				
Pass criteria	Test organisms	Temperature	Clean conditions (0.03% BSA)	Dirty Conditions (0.3% BSA)
>4 log reduction	Yeast - Candida albicans (DSMZ 1386) - Saccharomyces cerevisiae var diast. (DSMZ 70487)	4°C	1.5% 30min.	2.0% 30min
		20°C	1.5% 5min,	2% 5min.
	1.5% 15min.			
	40°C	-	1.25% 15min.	

EN 13697 Bactericidal and Yeasticidal efficacy				
Pass criteria	Test organisms	Temperature	Clean conditions (0.03% BSA)	Dirty Conditions (0.3% BSA)
Bactericidal efficacy >4 log reduction Yeasticidal efficacy >3 log reduction	Bacteria - Staphylococcus aureus (DSMZ 799) - Enterococcus hirae (DSMZ 3320) - Escherichia coli (DSMZ 682) - Pseudomonas aeruginosa (DSMZ 939) - Lactobacillus brevis (DSMZ 6235) Additional bacteria - Salmonella typhimurium (DSMZ 5569)	4°C	1.5% 30min.	1.5% 30min.
		20°C	1.5% 5min.	1.5% 5min.
			0.5% 15min.	
	4°C	2.0% 30min.	2.0% 30min.	
				20°C

Application

Trimeta CD is an acidic one-phase cleaner with special active ingredients for excellent cleaning results. It is particularly suitable for the CIP cleaning of large volume tanks as well as cylindroconical- and storage tanks.

Typical applications are:

- **Fermenting-/
Storage cellar**

Tanks, CCT, pipelines

Pre-rinse with diluted NaOH-solution (0.5 - 0.8 %) (optional)

Concentration: 1.5 - 2.0 %
Temperature: 5 - 40°C
Contact time: 30 - 60 minutes

To ensure best results a basic cleaning procedure (e.g., chlorine, alkaline product) of the tanks and system is recommended before changing to **Trimeta CD**.

- **Filter-/Bright Beer
Tank Cellar**

Buffer tanks, BBT, pipelines

Concentration: 1.0 – 2.0 %
Temperature: 5 - 40°C
Contact time: 30 - 60 minutes

- **Bottling Hall**

Pipelines, beer mains* e. g.

Concentration: 1.0 – 2.0 %
Temperature: 5 - 40°C
Contact time: 30 - 60 minutes

* Only by acid-resistant filler parts

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

Trimeta CD can be reused for long periods without problems. Due to microbiology the concentration in the storage tank should be maintained at an adequate level.

Important indications !

- Effluent, containing chemicals, must only be discharged according to the local regulations
- Chemicals containing effluent must only be discharged into the biological treatment station after passing the neutralization- and buffer tank
- When discharging chemically polluted effluent, it is essential to pay specific attention to the bacteria toxicity of this water. This is especially important when dealing with biocide containing effluents and anaerobic sewage plants
- In case of doubt please seek advice from our technical service

Monitoring

Concentration determination

- **Titration**

Receiving flask:	50 ml application solution
Titration solution:	1.0 n NaOH
Indicator:	Phenolphthalein
Titration factor:	0.44

Volume added in ml x 0.44 = % **Trimeta CD**

- **Conductivity** Specific conductivity of **Trimeta CD**

Concentration control

Trimeta CD is usually added directly to the stacking tank by means of **Elados EMP/EMP / EcoPro / EcoAdd** diaphragm pumps.

We recommend the use of **Elados EMP / EcoPro / EcoAdd** diaphragm pumps for metering and for control and phase separation the use of **LMIT 09** inductive conductivity meters.

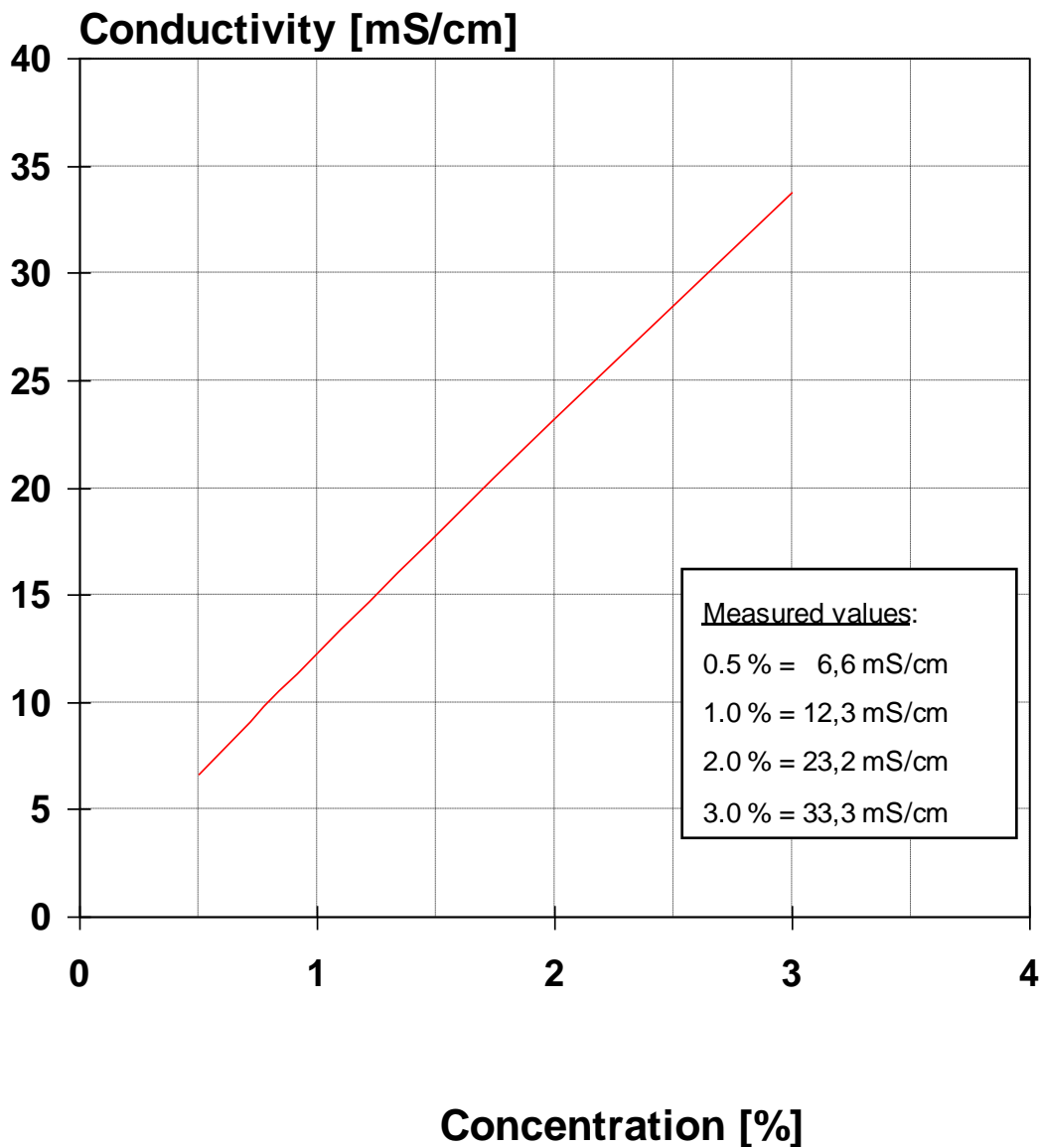
Please visit www.ecolab-engineering.com for more information.

Safety

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

Use biocides safely. Always read the label and product information before use.

Trimeta CD
Spec. Conductivity (20 °C, 0 °d)
Temperature coefficient: α 1.06



The statements, information and data presented herein are believed to be accurate and reliable. The information describes the characteristic features of **Trimeta CD** 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.

(Version August 2022)