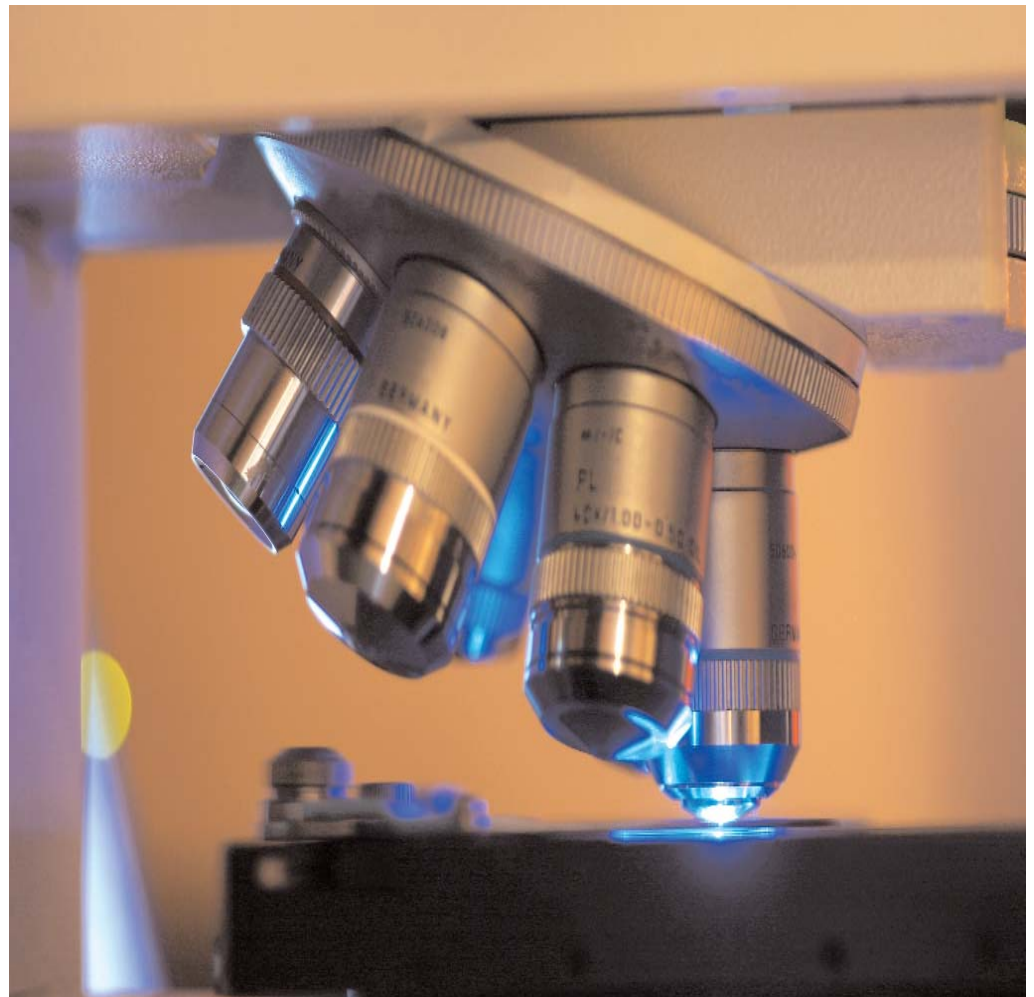


Biotechnology Industry Programme



*Innovative Hygiene Solutions for all your
Process Hygiene needs*

Ecolab your Natural Partner in Process Plant Cleaning

Ecolab can offer you:-

It is our aim to have a thorough understanding of your needs and requirements. All our customers have unique needs and we take the time to understand your business and tailor our solution for you.

Effective Products Portfolio

Our extensive range of cleaning products has been designed for the removal of tough residues typically found in the Biotechnology Industry.

These include up-stream process soilings, such as:-

- * Tenacious fermentation residues
- * Baked-on proteins
- * Mixed in-organic and organic materials



We have products specifically formulated for cleaning a wide variety of membranes for the down-stream harvesting and separation process.

We add value through our After Sales Service

"Cleaning Recommendation"					
Eprinomectin Long-Acting Injectable					
CIP-Cleaning & Disinfection					
PHARMACOS		Typical residues:			
EPRINOMECTIN		Triazolin, N-methyl, pyridoxine (NPM), Eprinomectin, Propylene glycol acic (PLGA)			
Specific application area:		General information:			
Injectable production area:		For all P3-cosa® products validation help is available			
Cleaning frequency: After each production batch					
Cleaning Procedure & Chemicals		%	°C	min	Notes
Pre-rinse	Water	-	30	-	Water type depends on the facility
Alkaline Cleaning	P3-cosa® CIP 92	2.0	-	-	Add P3-cosa® PUR 85 as a cleaning additive
	P3-cosa® PUR 85	1.0	80	20	Add 0.5% P3-cosa® PUR 85 at the beginning of the alkaline cleaning step and another 0.5% after 10 min cleaning time. In the case of closed systems take measures for pressure relief
Intermediate Rinse	Water	-	ambient	-	Rinse until pH-neutral or conductivity= control water level
Acidic Cleaning	P3-cosa® CIP 72	1.5	60	20	
	Water	-	ambient	-	Rinse until pH-neutral or conductivity= control water level
Disinfection	P3-cosa® DES	0.75	20-30	15	
Final Rinse	Water of minimum declared water quality	-	-	-	Water quality otherwise accepted level

- * Optimisation of cleaning processes
- * Laboratory and plant cleaning trials
- * Troubleshooting
- * Training staff in cleaning methodology and practical techniques
- * CIP auditing and verification
- * Cleaning plans
- * Expertise and industry knowledge

Delivering our on-going commitment to you, our customer...

We offer complete service and systems to cover all of your institutional, industrial and hospital cleaning and sanitation needs. Ask for more of our products and services in Europe and Worldwide. Ecolab - Your Partner for Total Hygiene Solutions.

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