Enzyme based membrane cleaning and biofilm removal

**Title and name of product or technology**

Enzyme based membrane cleaning and biofilm removal

**Abstract**

REALCO propose an enzyme based range of products dedicated to membrane cleaning. These products are used on various kind of filtration (dead-end, cross-flow), material (ceramic, organic) and application field (food industry, wastewater…). As an enzymes specialist for over 20 years, REALCO has the expertise and lab equipment to develop and propose tailor made solution for specific substrates or applications. Other enzyme application is the removal of biofilms. Enzyme-based process allow to efficiently remove biofilm and subsequent contamination risk from open or closed surfaces, without any risks for the users or the equipment.

**Description including main features/advantages**

REALCO, founded in 1968, is a SME company located in the scientific park of Louvain-La-Neuve. The company was involved in traditional products commercialization (detergents, disinfectant and descaling agent) for ten years before it developed its activity in biotechnologies applied to water treatment and cleaning. REALCO is now expert in developing process and manufacturing products based on enzymes or enzymes/bacteria complex (EBC).

REALCO research on enzymes allowed to optimize their use in industrial cleaning (surfaces, CIP,…) and to get involved in a leading field like filtration membrane cleaning. REALCO propose responsible products which meet the specific needs of professionals in maintenance. These products are recommended for their cleaning performances, their safety for the operator and their non-aggressiveness for the machinery and tools. They also have a positive - and patented - impact on the environment.

- High cleaning performances
- Optimal flow recovery
- Energy savings (lower temperature)
- Injuries risk reduction
- Material preservation
- Membrane lifetime increase (till 100%)
- Safe for the environment

**Innovative aspects**

Compared to classic solutions like caustic soda that might be efficient but that damages equipment, enzymes detergents show also high or even higher efficacy but without damaging these equipments. That is very attractive for expensive equipment like membranes or for application like biofilm removal that need very aggressive tools. On top of this, is also the environmental aspect.

**Current and potential industrial users/domains of application**

- Food industry process (dairy, fruit juice, protein extraction/concentration, wine, …)
- Wastewater treatment (MBR)
- Water desalination
- Drinking water

**Current state of development**

On the market
<table>
<thead>
<tr>
<th>Contact details</th>
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<tbody>
<tr>
<td>Organisation</td>
<td>REALCO S.A.</td>
</tr>
<tr>
<td>Website</td>
<td><a href="http://www.realco.be">www.realco.be</a></td>
</tr>
<tr>
<td>Contact person</td>
<td>Mr Gauthier Boels</td>
</tr>
</tbody>
</table>
| Address                 | Av Albert Einstein 15  
                         | B-1348 Louvain-La-Neuve  
                         | Belgium                 |
| Phone                   | +32 10 45 30 00     |
| Fax                     | +32 10 45 63 63     |
| Email                   | g.boels@realco.be   |