

WHAT IS LEVAPOR ?

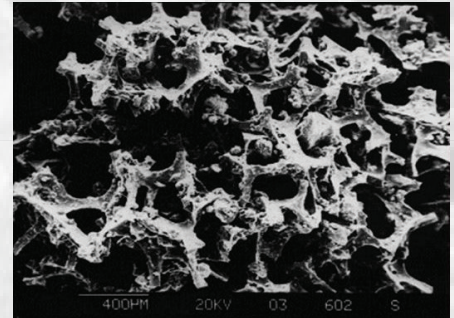
LEVAPOR carrier are innovative, designed materials with variable ideal properties, allowing tailor made solutions for a wide field of applications in biofilm reactors.

PROPERTIES

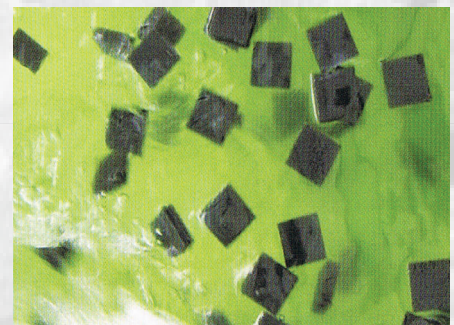
LEVAPOR carrier are comprising of, porous, flexible, easily fluidisable plastic foam cubes, impregnated with adsorbing pigments. They become colonized very fast by specialized microorganisms, resulting in bioprocesses with remarkably higher efficiency and stability, regenerating the adsorbing capacity biologically

FIELDS OF LEVAPOR APPLICATION

- Biotreatment of municipal and industrial effluents, especially in nitrification / denitrification and removal of persistent and hazardous pollutants.
- Biological gas treatment, including acidifying pollutants, like chloroorganics, mercaptans NH_3 and H_2S .
- Processes applying reuse of water, like fish hatcheries and aquacultures.
- Fermentation of bioproducts



LEVAPOR carrier: cross section and colonised by anaerobic bacteria



LEVAPOR carrier in fluidised biofilm reactor



Selected treatment plants using **LEVAPOR** fixed microorganisms



Anaerobic-aerobic Plant for biotreatment of toxic pulp mill effluents



Two-step bio-trickling filter (BTF) purifying polluted air in a sludge treatment plant



Multistage anaerobic-aerobic plant for treatment of chemical site effluents



Combined, biological-physico-chem. treatment plant for treatment of complex industrial groundwater

BENEFITS OF LEVAPOR

- 50 to 400% higher removal efficiency than with suspended biomass
- Remarkably higher process stability
- Remarkably lower excess sludge production
- Only 12 to 15% degree of reactor filling instead of usual 30 to 70%
- Higher removal of persistent, hazardous pollutants via
- Buffering of toxic shock loadings
- Short startup period of bioprocesses
- Remarkable process economy and
- Simple technology, applicable also during plant operation

Additionally to **LEVAPOR** carrier

We do offer also our services in designing tailor made problem solutions, based on 40 years experiences on biofilm technologies both in science and in the practice.

Our tools are:

- Analysis of the problem
- Elaboration of alternatives for problem solution, supported by
- Practice oriented biotests (optional)
- Process Design and/or Engineering
- Production and delivery of the required LEVAPOR type and
- Plant start up using optimized mixed biomass, enriched with microbes essential for degradation



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