

# Newpond® BACTERIA CARRIER MATERIAL

Components for water and wastewater treatment

### BACTERIA CARRIER MATERIAL

### **Product properties**

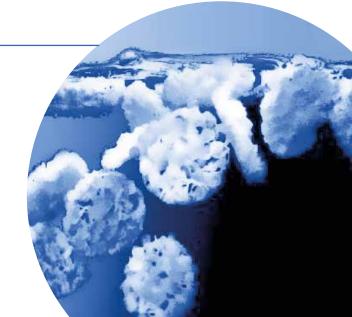
- large usable surface
- high efficiency
- low abrasion of adherent bacteria due to the stream
- easy cleaning and simple handling
- resistant and pH-neutral
- high chemical resistance

### TECHNICAL DATA

| Material         | special HDPE  |
|------------------|---------------|
| Diameter         | 20 oder 55 mm |
| specific Surface | 500 m²/m³     |
| Bulk density     | 200 g/l       |
| Material density | 0.95 kg/l     |
| Max. Temperature | 80 °C         |

All data are approximate data!

- suitable for aerobic and anaerobic processes
- COD reduction
- BOD reduction
- nitrification
- recirculation by stream





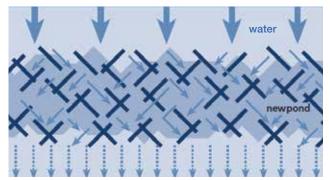
## FUNCTION

In waste water treatment microorganism are of particular importance because they are able to degrade pollutants. In conventional aeration tanks these organism appear in small floccules dispersed in the water. This is called activated sludge.

By the proportion of the activated sludge in the aeration basin, the degradation rate can be controlled. But the amount of the activated sludge in the tank cannot be increased arbitrarily. At a certain amount of suspended biomass the waste wateir will become too viscous/muddy for an effective treatment. In this case the tank volume has to be increased by civil works to keep the higher amount of activated sludge in suspension. As an alternative to complex and cost intensive civil works respectively new buildings, it is possible to increase artificial the biomass in the tank by the application of biofilm carriers. Depending on the tank size, its form and internals the amount of activated sludge can be doubled. Newpond<sup>©</sup> is a biofilm carrier with a very high

specific surface. It meets all demands on a modern high efficiently biofilm carrier.

Microorganism grow best in so-called biofilms. These slimy films adhere everywhere where the microorganism find a surface they can attach to. On the carrier a biofilm develops which is made up or several layers. The living conditions within these layers are partly quite different. By this means a plenty of poliutants can be degraded.



### NEWPOND<sup>®</sup> IS APPLICABLE FOR ALL COMMON PROCESSES USING BIOFILM TECHNOLOGY

- for rotating drum systems
- for fluidized bed reactor systems
- for sewage treatment plants
- for fixed-bed reactor systems like trickling filter
- for the expansion of existing treatment plants

Our continuing commitment to quality product, may mean a change without notice of specification, design and other content included in this brochure.





### CONTACT

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### Certified ISO9001:2015

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Azienda con sistema di gestione qualità certificato secondo la Norma ISO9001:2015

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