

FILTRALITE®

# Filtralite® Pure



**DRINKING WATER**

Filtering the water for tomorrow







# Are you looking for...

- Increased water output without expanding existing facilities
- Savings on operation costs
- A sustainable solution for water filtering
- An easy to implement product

## Our purpose

Whether you live in Cairo, Chicago, or Copenhagen, there is an increasing influx of people moving to the big cities. Demographic changes and urbanization across the globe puts a strain on cities and their capacity to produce basic necessities such as drinking water.

As water flows through the filter bed, the unique porosity of Filtralite® Pure filter media offers optimum conditions to retain and adsorb more contaminants than conventional filter media can. The increased surface area allows larger volumes of water to be filtered through the same volume of media. Water management facilities can thereby increase their output without having to rebuild and expand existing facilities simply by replacing the conventional filter media with Filtralite®.

Not only do our products increase water output volume, they also decrease operational costs. Facilities that replace their conventional sand filters with Filtralite® Pure filter media can expect to recover the money spent in less than 3 years in operational cost savings.

Filtralite® Pure filter media requires fewer backwashes, needs less energy, and creates less water loss, which at the end of the day means more water out of your plant. Filtralite® ensures you get more out of the resources you already have.

As cities are gearing up for the future, Filtralite® Pure filter media is an innovative and premium filtering product tailored to meet tomorrow's needs.





# What is Filtralite® Pure filter media?

Designed for drinking water plants and pre-treatment for desalination, Filtralite® Pure is a filter media suitable for both physical filtration and biological treatment.

**Filtralite® products can be used:**

- In **single media filters**
- In **dual media filters**, Filtralite® Mono-Multi combines two different qualities of Filtralite® products
- In **biological filters** for ammonia, iron, manganese, arsenic, and other biodegradable substances removal



### What are the advantages of a Filtralite® Pure single/dual media filter?

Compared to traditional filter media, Filtralite® has much **higher porosity**, which gives:

- lower initial head loss
- slower head loss build up
- higher particle storage capacity
- lower backwash rates

### Filtralite® Pure performance in numbers

In single media filters, time between backwashes can be extended by up to 500%<sup>1</sup>

In dual media filters, up to 8 times less frequent backwashes are needed<sup>2</sup>

In biofilters, ammonia removal is above 90%<sup>3</sup>

Backwash rates lowered by 35%<sup>4</sup>

Existing Filtralite® filters operate **from 2 m/h up to 20 m/h for physical filtration and up to 30 m/h for biofilters**

### What are the advantages of Filtralite® Pure in biological filters?

Compared to other media, Filtralite® has much **higher porosity**, which gives:

- greater specific area for biofilm growth
- higher number of macropores
- lighter density than traditional media
- higher resistance to abrasion

Our project references:

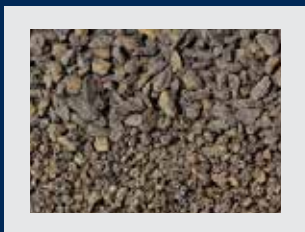
<sup>1</sup> Sluvad, Wales, UK <sup>2</sup> Thames Water, UK

<sup>3</sup> Tai Po, Hong Kong <sup>4</sup> Bedrichov, CZ

# Filtralite® Pure Mono-Multi

Designed for drinking water plants and pre-treatment for desalination, Filtralite® Pure Mono-Multi is a filtration media that can easily replace sand in open and under pressure filtering installations, without changing any capital equipment.

Mono-Multi consists of two types of Filtralite® Pure filter media with different densities and sizes to improve particle removal, increase filter runs, and improve production capacity.



	DRY PARTICLE DENSITY	GRAIN SIZE
Upper layer	1.000-1.200 kg/m <sup>3</sup>	1,5-2,5 mm
Lower layer	1.500-1.700 kg/m <sup>3</sup>	0,8-1,6 mm

## Filtralite® Pure Mono-Multi performance in numbers

- Filtering infrastructure reduced by **30 %**<sup>1</sup>
- Production rate increased by up to **2 times**<sup>2</sup>
- Existing Filtralite® Mono-Multi filters operate from **2 m/h up to 20 m/h**
- Up to **8 times** less frequent backwashes are required<sup>3</sup>
- Return on investment < **3 years**<sup>4</sup>

Our projects references:

<sup>1</sup> Bedrichov, CZ

<sup>2</sup> Thames Water, UK

<sup>3</sup> Thames Water, UK

<sup>4</sup> Bedrichov, CZ & Fredrikstad, NO









## More about Filtralite® ...

Filtralite® filter media is made by heating specialized clay to around 1200° C. The heating creates highly porous ceramic media which is then crushed and sieved to specific sizes.

Dry particle densities range from 500 to 1.600 kg/m<sup>3</sup> and aggregate sizes range from 0.5 to 20 mm, and can be “tailor-made” for specific applications.

In addition to its low density and high porosity, Filtralite® offers high abrasion and impact resistance.

Filtralite® meets the AWWA standard for Granular Filter Media and is NSF61 approved.

**Filtralite® develops and manufactures quality filter media for a variety of water treatment applications:**

- **Filtralite® Pure** for drinking water solutions, both for physical filtration and biological treatment
- **Filtralite® Clean** for wastewater treatment, both for biological process and tertiary filtration
- **Filtralite® Nature** for onsite water remediation

# FILTRALITE®

### Contact information

[www.filtralite.com](http://www.filtralite.com)

Filtralite is a Leca International brand



Certified to  
EN 12905



Certified to  
NSF/ANSI 61-G