

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 to the big cities. Demographic changes and urbanisation across the globe put a strain on cities and their capacity to produce basic necessities such as drinking water.

With its unique porosity, Filtralite® Pure filter media offers optimum conditions for water to flow through the filter bed in order to retain and adsorb more contaminants. This feature allows for larger volumes of water to be filtered through the same volume as contact area is increased. Water management facilities can thereby increase their output without having to rebuild and expand existing facilities simply by replacing the conventional filtering media with Filtralite®.

Our products not only increase water output volumes, they also decrease operation costs. By replacing conventional sand filters with Filtralite® Pure filter media, you can expect to get your money back in less than 3 years.

Because Filtralite® Pure filter media requires fewer backwashes, which means less energy and less water loss, which at the end of the day means more water out of your plant. This way, we ensure you get more out of the resources you already have.

As cities are gearing 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 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
- and lower backwash rates.

Filtralite® Pure performance in numbers

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

In dual media filters, up to 8 times less frequent backwashes ²

In biofilters, ammonia removal superior to 90% ³

Backwash rates lowered by 35% ⁴

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

- great specific area for biofilm growth
- high number of macropores
- lighter density than traditional media
- and high resistance to abrasion.

Our projects references:

¹ Sluvad, Wales, UK ² Thames Water, UK

³ Tai Po, Hong Kong ⁴ Bedrichov, CZ

Filtralite® Pure Mono-Multi

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

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



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

Filtralite® Pure Mono-Multi performance in numbers

- Filtering infrastructure reduced by **30 %**¹
- Production rate increased by up to **2 times**²
- Existing Filtralite® Mono-Multi filters operate from **2 m/h up to 20 m/h**
- Up to **8 times** less frequent backwashes³
- Return on investment < **3 years**⁴

Our projects references:

¹ Bedrichov, CZ ² Thames Water, UK

³ Thames Water, UK ⁴ Bedrichov, CZ & Fredrikstad, NO





More about Filtralite® ...

Filtralite® filter media is made by heating clay to around 1200° C, followed by crushing and sieving.

Dry particle densities in the range from 500 to 1.600 kg/m³ and aggregate size from 0 to 20 mm can be “tailor-made” for specific applications.

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

Filtralite® develops and manufactures quality filter media for all 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

Filtralite is a Leca International brand



Certified to
NSF/ANSI 61-G