

Katalox Light® Advanced Filtration Media



FEATURES

- High MnO₂ content (10%),
- Very High Surface Area,
- Light Weight – Less Backwash Higher Filtration Rates,
- Filtration of sand, sediment and suspended solids down to 3 micron,
- High efficiency removal capacity of Iron, Manganese and Hydrogen sulfide.

BENEFITS

- Low media replacement frequency, every 7 to 10 years,
- No chemical dosing,
- No disinfection by-products,
- Low operating costs,
- High Service Flow 10 - 20m/h,
- Low Backwash of 25 - 30m/h,
- Low Freeboard of 40%
- High Loading Capacities:
 - 3000 mg/L for Fe²⁺
 - 1500 mg/L for Mn²⁺
 - 500 mg/L for H₂S
- Can be backwashed with OXYDES-P to oxidize contaminants if needed.

Filtration of

- Down to less than 3 micron
- Suspended Solids
- Sediments
- Turbidity
- Organics
- Color
- Odor

Removal of

- Iron
- Manganese
- Hydrogen Sulfide
- Arsenic
- Radium
- Heavy Metals
- Radionuclides

What is Katalox Light®?

Katalox Light® is a new brand of revolutionary advanced filtration media completely developed in Germany. It's composition simply makes it outstanding against the contemporary filter media available in water treatment industries, like sand, BIRM, Greensand Plus, Manganese Greensand etc.

Katalox Light® is manufactured in Germany.

Katalox Light® is engineered with unique MnO₂ coating technique on Zeosorb, providing it light weight, higher filtration surface, more service life and more reliable performance (filtration down to 3 µm) than any other existing granular filter media.

Katalox Light® is used in water treatment systems for residential, commercial, industrial and municipal applications worldwide, for high level filtration, color and odor removal, Iron, Manganese, Hydrogen Sulphide removal, efficient reduction of Arsenic, Zinc, Copper, Lead, Radium, Uranium and other radionuclides and heavy metals.

Katalox Light® is Certified to NSF/ANSI-61 standard for drinking water applications and meets the ANSI/NSF 372 Lead free compliance.

Advanced use

High concentration coating of MnO₂ on the Katalox Light® surface (10%) is the biggest advantage compared to any similar product available in the market. This makes the oxidation and co-precipitation of contaminants much more effective. For removal of very high concentration of contaminant it's recommended to use H₂O₂ as an oxidizer, which provides accelerated catalytic oxidation on the surface of the media. Conventional oxidizing agents like chlorine or potassium permanganate also could be used if required. Katalox Light® can be used for Arsenic, Radium, Uranium removal but in these cases there is requirement of Iron in the water. Katalox Light® system is designed with special iron dosing technology which has many advantages over Adsorbent media used for Heavy Metal removal. The Future of water treatment, as we see it, is going to give us more difficult challenges and we all need more advanced and robust products. In Watch Water®'s vision, Katalox Light® can be addressed for advanced concepts like Water Reuse, Controlled Adsorption of Arsenic and Heavy Metals, advanced Membrane pre-treatment, Zero-Discharge Cooling tower etc.





Composition

Compound	Typical Value	Specification
Zeosorb	85%	>85%
MnO ₂	10%	>9,5%
Hydrated Lime*	5%	<5%

*Hydrated lime is used as the binding material.

Recommended System Operating Conditions

Inlet Water pH	5,8 – 10,5	
Freeboard	40%	
Min. Bed Depth	29,5"	75 cm
Optimal Bed Depth	47"	120 cm
Service Flow	4 – 8 gpm/ft ²	10 – 20 m/h
Backwash Velocity	10 – 12 gpm/ft ²	25 – 30 m/h
Backwash Time	10 – 15 min.	
Rinse Time	2 – 3 min.	

Physical Properties

Appearance	Granular black beads		
Odor	None		
Mesh Size	14 x 30	0,6 – 1,4 mm	
Uniformity Coefficient	≤ 1,75		
Bulk Density	66 lb/ft ³	1060 kg/m ³	
Moisture Content	< 0,5% as shipped		
Filtration	< 3 micron / 3.000 mg/L		
Removal Capacity (approx.)	Fe ²⁺ alone	85,000 mg/ft ³	3.000 mg/L
	Mn ²⁺ alone	42,500 mg/ft ³	1.500 mg/L
	H ₂ S alone	14,000 mg/ft ³	500 mg/L

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