

PROCESS FOR REMOVAL OF

# IRON, MANGANESE AND HYDROGEN SULFIDE REMOVAL<sup>®</sup>

**REVOLUTION**

**KATALOX<sup>®</sup>-LIGHT**

Municipality  
Industrial &  
Commercial  
Applications



**DOWN TO 3 MICRON**

**WITHOUT**

**ANY**

**REGENERATION**

ZEOSORB<sup>®</sup> impregnated  
and coated with MnO<sub>2</sub>  
with

**HIGHEST**



Catalytic Oxidation  
Filtration &  
Clarity of water



## **WATCH FILTRATION TECHNOLOGY**

High efficient filtration media removing 90% of suspended particals

FOR MORE INFORMATION [WWW.WATCHWATER.DE](http://WWW.WATCHWATER.DE)

## INTRODUCTION

Watch® **Katalox®-Light** is the first of its type a revolutionary filtration media for removing contaminants from water & air using a unique technology. **Katalox®-Light** is based on **ZEOSORB®** and with a special process impregnated and then coated with  $MnO_2$ . Coating acts as a protective agent for the impregnated substance. Combinations of different coatings and impregnations allow to use only one filtration media for removal of many many contaminants from both water & air. It is the only media available to remove acetone, ethylene glycols, formaldehyde and other contaminants. **Iron manganese** and **hydrogene sulfide** is the easiest problem for **Katalox®-Light**. Its active surface coating oxidizes and precipitates soluble iron and **manganese**. **Hydrogen sulfide** is oxidized to a sulfur. The Precipitates are filtered out in the granular bed and removal by backwashing. This allows a much broader range of operation then any other media available in the market. A pH level as low as 6.0 can be treated. Dissolved oxygen is not essential. **Katalox®-Light** weight **reduces backwash water consumption to half then all conventional filter medias**. When the oxidizing power of **Katalox®-Light** is reduced, the impregnation in this case potassium permanganate ( $KMnO_4$ ) regeneration its oxidizing capacity back to normal with internal regeneration. Only the new bed slowly should be backwashed at the time of installation. **So once again Katalox®-Light. needs no regeneration either intermittent or continuous.**

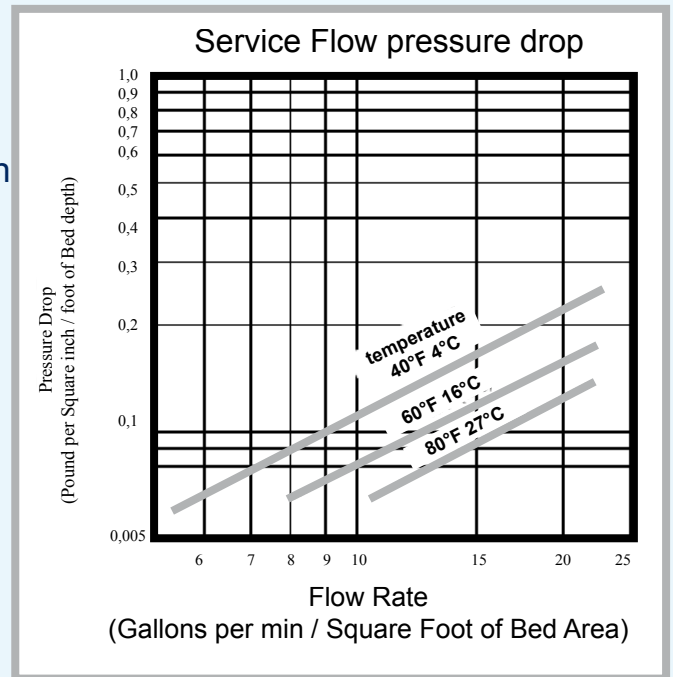


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PHYSICAL PROPERTIES			CONDITION FOR OPERATION		
	<b>Color</b>	Dark brown		<b>Water pH range</b>	6-9
<b>1</b>	<b>Bulk Density</b>	25kg / 25liters		<b>Max Water temp.</b>	50°C / 103°F
<b>2</b>	<b>Effective Size</b>	0,5-1mm / mesh (15x18) 1,5 - 2,5mm / mesh (8x14)		<b>Bed depth</b>	80-100cm



<b>Freeboard</b>	50% of bed depth
<b>Service flowrate</b>	Continuous 25 liters/min 6gpm / sq.ft
<b>Backwash flowrate</b>	40 liters / min / sq.ft 10gpm / sq.ft
<b>Iron removal</b>	<b>up to 30 ppm</b>
with SHP Dosing	up to 50 ppm (SHP)
(SHP) = Stabilized Hydrogene Peroxide	
<b>Manganese</b>	<b>up to 15 ppm</b>
<b>Hydrogen Sulfide</b>	<b>up to 10 ppm</b>

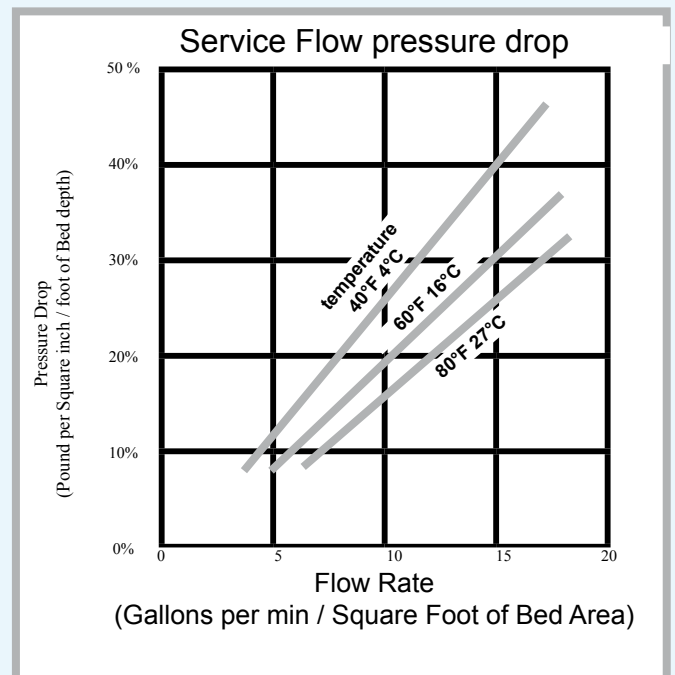


Water with very high contaminants needs a continuous regeneration with SHP Dosage. SHP is a very powerful oxidizing agent HYPEROXIDE SHP. When it decomposes, it forms water and reduce oxygen, which makes it an attractive „enviromentally friendly“ product. It is a clean oxident.



## APPLICATIONS

- Drinking water disinfection
- Cooling & processwater cleaning
- Cooling & processwater biocide
- Pool water disinfection
- Antimicrobial applications
- Iron and manganese removal
- BOD / COD removal
- Arsenic removal
- Sulfide oxidation-hydrogen sulfide removal
- Removal of iron sulphides
- Removal of polysulphides
- Replacement of ozon, chlorine



## COMPARSION CHART

According to the new laws, and governing regulations using  $KMNO_4$  is forbidden. All other medias are based on regeneration. Watch water wants to bring to your attention that our **Katalox<sup>®</sup>-Light** is an alternative. The price of Katalox<sup>®</sup>-Light. is very competetive. Using **Katalox<sup>®</sup>-Light**. you will save 100% on very dangerous chemicals like chlorine and potasium permeganate. It is a direct replacement for GreenSand and GreenSand plus.

## SHIPPING

Weight      25 liter bags  
                  40 bags per pallet

if you would like to have printed brochures or have questions please contact us at [sales@watchwater.de](mailto:sales@watchwater.de)

**a Wise COST-EFFECTIVE SOLUTION**