

# WHY USE?

## KATALYST – LIGHT COST BENEFITS

**Katalyst-Light**<sup>®</sup> is the **Best Available Technology (BAT)** as the filter media of the future and has much more to offer.

### Filtration Why should you use Katalox-Light<sup>®</sup> instead of any sand products?

- **Better Filtration (3 microns)**, means crystal clear water
- Leading Water treatment system manufacturers recognize this benefits and have chosen to promote this unique Katalox Light media.
- Removal of Hydrogen sulfide – better drinking water comfort – no odor – bad taste – no more irritation to skin and eyes
- Because of its very high surface area, the backwash rate is very less as well as the frequency of backwash – therefore **saving water up to 50%** than conventional products

### Weight

#### How much Katalyst-Light<sup>®</sup> do you need?

- **Katalyst-Light**<sup>®</sup> has a higher surface thus lower bulk and true density than medias based on Sand, hence you require 65% by weight of the Sand-based products and this will very depending on the size of the water-treatment systems.

**Example:** 30 kg (66 lb.) bag of **KL** is equivalent to volume of 28.3 liters (1 ft<sup>3</sup>) where sand products are 20 kg (44 lb.) in volume for 14.15 liters (½ ft<sup>3</sup>)

		<b>Volume</b>	<b>Weight</b>
1 bag of <b>Katalyst-Light</b> <sup>®</sup> ( <b>KL</b> )	=	28.3 liters	30 kg (66 lb.)
1 bag of Greensand Plus (GSP)	=	14.15 liters	20 kg (44 lb.)

**Example:** For requirement of,  
**1000 liters** of filter media you need **35.3 bags** (each 30 kg) of **KL**  
Vs.  
**1000 liters** of filter media you need **70.7 bags** (each 20 kg) of **GSP**

And here's the difference in weight:

1000 liters of GSP	=	1413.4 kg	(3116 lb.)
1000 liters of KL	=	1059.0 kg	(2335 lb.)
Difference	=	354.4 kg	(781 lb.)

-and this is paid for higher transport cost

- Higher the bulk density, higher the weight per volume of the media and higher the transport cost !

### **Example with a filter design:**

All pressure vessels have a standard size, e.g. let's take 24x69 and specify the amount of Filter-media required:

Typical 24x69 Pressure Vessel has a volume of 450 liters

If one wants to design a system with this pressure vessel model according to Greensand Plus's specification with 50% freeboard (225 liters of media fill),

**GSP bags needed** = 225 liters / 14.15 liters/bag = **16 bags** (exact value 15.9 bags)

**KL bags needed** = 225 liters / 28.3 liters/bag = **8 bags** (exact value 7.95 bags)

*...and 80 kg (176.37 lb.) extra weight for transportation for GSP*

## **Why Katalyst-Light® has better performance?**

### **Contact time Why and how you can have high contact time in Pressure Vessel?**

Tests carried out by all universities in the world has proved that **Media Filters** designed with higher depth and with less freeboard can filter out contaminants down to less than 2 to 3 microns.

This compares with,

**50% freeboard** with **sand media** providing **50 micron filtration**

Vs

**40% freeboard** with **Katalyst-Light®** filters providing **2-3 micron filtration**

**Katalyst-Light®** removes heavy metals and potentially harmful silica compounds.

**Katalyst-Light®** is **Made in Germany** like Mercedes, Porsche, BMW or Audi – with strict quality control and it is WQA certified to meet NSF/ANSI 61 standard.