

Savings with Katalox-Light

KATALOX – LIGHT Cost benefits

WHY USE?

Katalox-Light[®] is the **B**est **A**vailable **T**echnology (**BAT**) as the filter media of the future and has much more to offer.

Filtration Why should you use Katalox-Light[®] 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 Katalox-Light[®] do you need?

Katalox-Light[®] 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 ³) | | |
|----------|---|--|--|
| | where sand products are 20 kg (44 lb.) in volume for 14.15 liters (½ ft³) | | |

| | | Volume | Weight |
|--------------------------------------|---|--------------|----------------|
| 1 bag of Katalox-Light® (KL) | = | 28.3 liters | 30 kg (66 lb.) |
| 1 bag of Greensand Plus (GSP) | = | 14.15 liters | 20 kg (44 lb.) |



www.watchwater.de

Katalox-Light® Cost Benefits

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.) |
|--------------------------|-------------|------------|
| <u>1000 liters of KL</u> | <u> </u> | (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 Katalox-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 Katalox-Light® filters providing 2-3 micron filtration

Katalox-Light[®] removes heavy metals and potentially harmful silica compounds.

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

www.watchwater.de



page