

AQUARBO® activated carbon

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AQUARBO® K835 / K814

Product Description

AQUARBO® activated carbon K835 and K814 are both granular activated carbons, which are often used for water purification due to their remarkable resistance to abrasion and to their high adsorption capacity. K835 and K814 are both produced by the steam activation process out of selected grades of coconut shells. Activated carbon made of coconut shells is very hard and therefore extremely resistant to abrasion, which allows repeated backwashing. Additionally high activity ensures adsorption of a higher amount of pollutants than other activated carbon types.

K835 has a particle size ranging between 0.5 – 2.5 mm, whilst K814 has a particle size of 1.4 – 2.5 mm.

In general, the smaller the granule size, the better the adsorption kinetics. Therefore K835 should be selected as a first choice. If the pressure drop causes a problem, then K814 should be selected. The graphs for pressure drop in function of linear velocity are shown on the back of this page.

Typical applications for K835 and K814

Since many years K835 and K814 are used in the field of water purification. Typical applications are:

- Potable water treatment: removal of chlorine, odour removal, improvement of taste, removal of ozone, removal of dissolved organics, pesticides, herbicides
- Treatment of water in swimming pools
- Beverage industry: removal of chlorine
- Home water filters
- Power stations: removal of oil from condensate
- Waste water treatment: treatment of industrial effluent
- Ground water sanitation

Reactivation

Where significant volumes of activated carbon are used, reactivation of the spent carbon offers economic advantages and eliminates the need for expensive or difficult product disposal.

K835 and K814 can be easily reactivated in order to be reused. Before reactivation the spent carbon has to fulfil activated coal reactivation criteria for spent carbon. The reactivation criteria for spent carbon are available from the local representative of Euroquarz GmbH.

Packing

The standard packing of K835 and K814 is a 25 kg paper bag with a polyethylene-bag inside. Alternatively Euroquarz can supply K835 and K814 in 500 kg big bags and if required also in bulk.



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Specification		AQUARBO® K835	AQUARBO® K814
Appearance		granular carbon	granular carbon
Particle size	mm	0.5 – 2.5	1.4 – 2.5
Apparent density	kg/m ³	500 +/- 25	475 +/- 25
Water content, as packed, maximum	%	5	5
Half value thickness for chlorine max	cm	3	5
Iodine number, minimum	mg/g	1050	1050
Specific surface area, BET-method	m ² /g	1100	1100

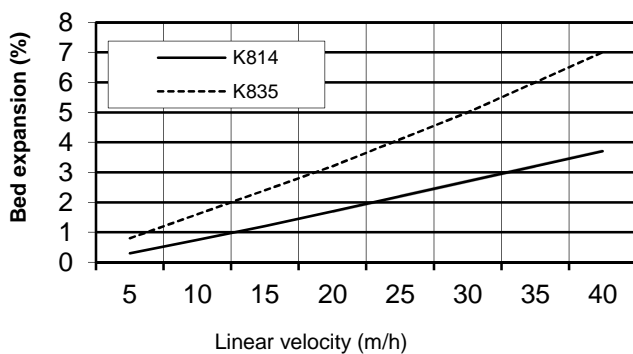


Figure 1: Typical bed expansion curves
All values are measured at 5 °C

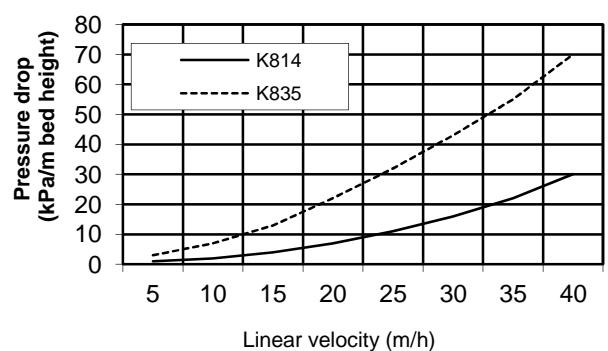


Figure 2: Typical pressure drop curves
All values are measured at 5 °C