

food

RESINDION RESINS FOR FOOD TREATMENTS

TDS110318

DIAION WA30 - Weakly Basic Resin

TDS 110318

DIAION WA30

DIAION WA30 is a highly porous type weakly basic anion exchange resin characterized by a high water retention content.

Its main characteristics are high operating capacity combined with a good regeneration efficiency, good exchange kinetics and great resistance to physical, thermal and osmotic shocks.

DIAION WA30 can be supplied under request in calibrated screen grades to meet all the standardized application systems (co-current, counter-current, fluidized beds, layered beds, continuous processes, etc.).

The main applications of this product are demineralization and decolorization of sugar and starch syrups, purification of formaldehyde, gelatine, glycerin, organic acids and others. Its composition complies with the existing food processing rules and regulations.

TYPICAL CHARACTERISTICS

Matrix	:	Highly porous copolymer styrene-DVB
Functional group	:	Tertiary amine
Colour and physical form	:	Yellowish-white opaque beads
Particle size range	:	0.3 ÷ 1.18 m m
Effective size	:	0.40 min m m
Uniformity Coefficient	:	1.6 max
Ionic form at the delivery	:	Free Base
Volume change	:	+ 25 max % F.B. --> Cl ⁻ form
Neutral salt splitting capacity	:	1.5 min eq/l
Water retention	:	43 ÷ 55 %
pH stability range	:	0 ÷ 14
Operating pH range	:	0 ÷ 9
Operating temperature	:	100 °C max (F.B.)
Shipping weight	:	635 g/l approx.
Standard packaging	:	25 or 1000 liter bags

RECOMMENDED OPERATING CONDITIONS

Minimum bed depth	:	800	m m
Linear operating flowrate	:	5 ÷ 50	m/h
Backwash expansion	:	50 ÷ 80	%
Regenerants	:	NaOH	NH ₃
Regenerant level range	:	40 ÷ 80	20 ÷ 35 g/l
Concentration range	:	2 ÷ 4	2 ÷ 4 %
Slow rinse volume	:	1.5 ÷ 2	BV
Fast rinse volume	:	4 ÷ 8	BV

Resindion S.r.l.

A Subsidiary of  MITSUBISHI CHEMICAL

OPERATING CAPACITY

Operating capacity depends on various parameters, such as inlet composition, endpoint, kinetic load and regenerant level.

In case of need, please contact our TECHNICAL DEPARTMENT.

Fig. 1 BED EXPANSION IN WATER

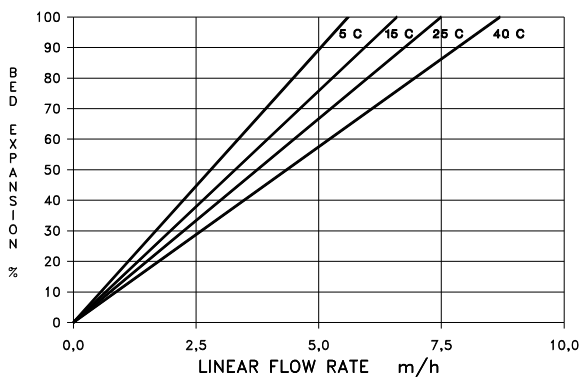
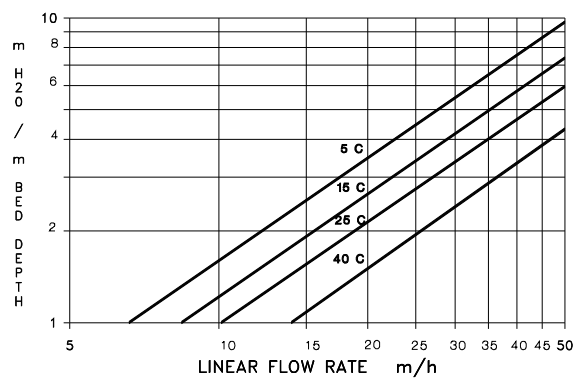


Fig. 2 PRESSURE DROP IN WATER



RECOMMENDED NaOH QUALITY FOR REGENERATION (*)			
Silica	10 ppm	Sodium carbonate	0.5 %
Iron	10 ppm	Sodium chloride	0.5 %
Mercury	2 ppm	Sodium sulphate	0.2 %
Heavy metals	5 ppm	Hardness	0 ppm
Chlorates	10 ppm as O ₂	Suspended solids	0 ppm
(*) Values referred to NaOH 100%.			