

food

RESINDION RESINS FOR FOOD TREATMENTS

TDS 11056

DIAION PA312 - Strongly Basic Resin

TDS 11056

DIAION PA312

DIAION PA312 is a "TYPE I" porous type strongly basic anion exchange resin.

Its main characteristics are high basicity, good exchange kinetics and resistance to physical, thermal, osmotic shocks.

It is particularly recommended in all cases where also all weak acids must be completely removed. The porous structure allows a better reversibility in front of organic fouling.

Its composition complies with the existing food processing rules and regulations.

DIAION PA312 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 water and organic solutions demineralization, organic acids separation and purification.

TYPICAL CHARACTERISTICS

Matrix	:	Porous copolymer styrene-DVB	
Functional group	:	Trimethylamine	
Colour and physical form	:	Light 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	:	Cl ⁻	
Volume change	:	+ 15 max	% Cl ⁻ → OH ⁻ form
Total exchange capacity	:	1.2 min	eq/l
Water retention	:	49 ÷ 55	%
pH stability range	:	0 ÷ 14	
Operating pH range	:	0 ÷ 12	
Operating temperature	:	60 °C max	(OH ⁻); 80 °C max (Cl ⁻)
Shipping weight	:	670	g/l approx.
Standard packaging	:	25 o 1000	liter bags

RECOMMENDED OPERATING CONDITIONS

Minimum bed depth	:	800	m m
Linear operating flowrate	:	5 ÷ 50	m/h
Backwash expansion	:	50 ÷ 80	%
Regenerant	:	NaOH	
Regenerant level range	:	50 ÷ 150	g/l
Concentration range	:	3 ÷ 6	%
Slow rinse volume	:	1.5 ÷ 2	BV
Fast rinse volume	:	4 ÷ 10	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

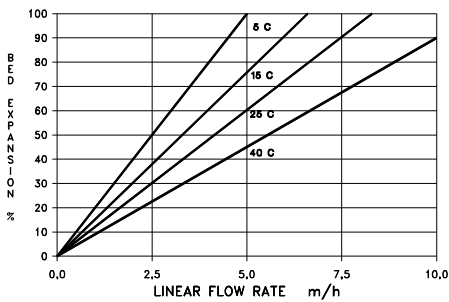
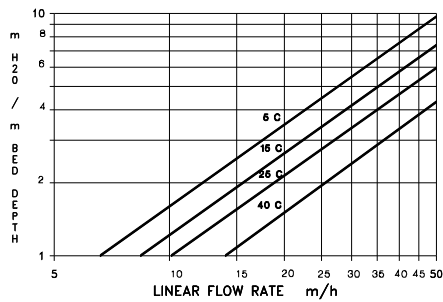


Fig. 2 PRESSURE DROP IN WATER



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%.			