

f food

RESINDION RESINS FOR FOOD TREATMENTS

TDS110312

Product Information

RELITE RAP1 - Strongly Basic Resin

TDS 110312

RELITE RAP1

RELITE RAP1 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; RELITE RAP1 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.

The main applications of RELITE RAP1 are organic solutions demineralization, organic acids separation and purification.

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

TYPICAL CHARACTERISTICS

Matrix	:	Porous copolymer styrene-DVB
Functional group	:	Trimethylamine
Colour and physical form	:	Light yellowish/white opaque beads
Particle size range	:	0.425 ÷ 1.18 m m
Effective size	:	0.45 mm min
Uniformity Coefficient	:	1.6 max
Ionic form at the delivery	:	Cl ⁻
Volume change	:	+ 23 % max (Cl ⁻ --> OH ⁻ form)
Total exchange capacity	:	1.2 eq/l min
Water retention	:	50 ÷ 58 %
Chemical stability	:	stable in the whole pH range
Thermal stability	:	60 °C max (OH ⁻); 80 °C max (Cl ⁻)
Shipping density	:	700 g/l approx.
Standard packaging	:	25 or 1000 liter bags

RECOMMENDED OPERATING CONDITIONS

Operating pH range	:	0 ÷ 12
Operating temperature range	:	60°C max (OH ⁻); 80°C max (Cl ⁻)
Minimum bed depth m m	:	800
Linear operating flowrate m/h	:	5 ÷ 50
Backwash expansion %	:	50 ÷ 80
Regenerant	:	NaOH
Regenerant level range g/l	:	50 ÷ 150
Concentration range %	:	3 ÷ 6
Slow rinse volume BV	:	1.5 ÷ 2
Fast rinse volume BV	:	4 ÷ 10

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

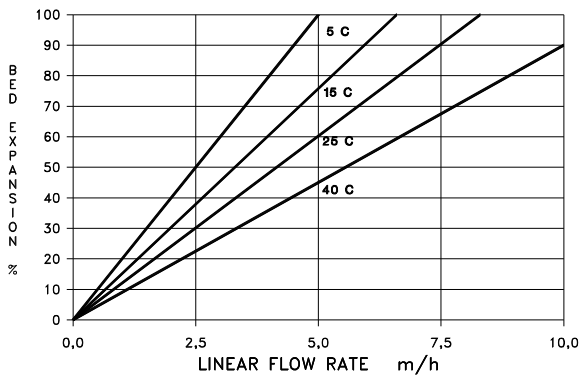
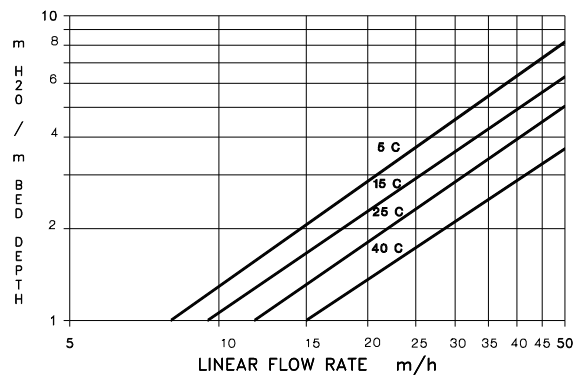


Fig. 2 PRESSURE DROP IN WATER



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%.			