

# water

## RESINDION RESINS FOR WATER TREATMENTS

TDS10069

RELITE 3A - Strongly Basic Resin

TDS 10069

### RELITE 3A

RELITE 3A is a "TYPE I" gel strongly basic anion exchange resin, having many excellent characteristics such as a very strong basicity and a good resistance to mechanical attrition, thermal and osmotic shocks. Besides, beads are particularly uniform.

It is particularly recommended in all cases where also all weak acids must be completely removed.

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

RELITE 3A 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 application of this product is the water demineralization.

### TYPICAL CHARACTERISTICS

Matrix	:	Gel copolymer styrene-DVB
Functional group	:	Trimethylamine
Colour and physical form	:	Light yellow transparent 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 <sup>-</sup>
Volume change	:	+ 25 max % Cl <sup>-</sup> --> OH <sup>-</sup> form
Total exchange capacity	:	1.3 min eq/l
Water retention	:	42 ÷ 48 %
Chemical stability	:	Stable in the whole pH range
Thermal stability	:	60 °C max (OH <sup>-</sup> ); 80 °C max (Cl <sup>-</sup> )
Shipping density	:	670 g/l approx.
Standard packaging	:	25 or 1000 liter bags

### RECOMMENDED OPERATING CONDITIONS

Operating pH range	:	1 ÷ 14
Operating temperature range	:	5 ÷ 40 °C
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	:	5 ÷ 10 BV

**Resindion** S.r.l.

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## 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

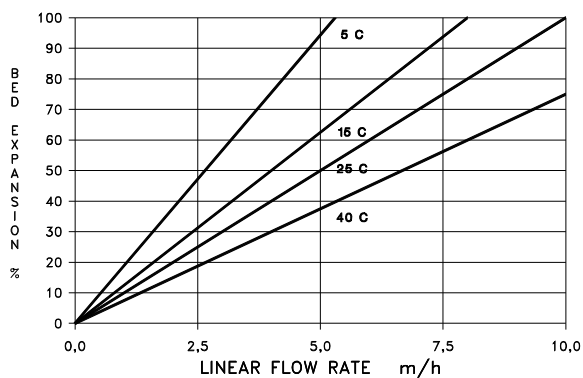
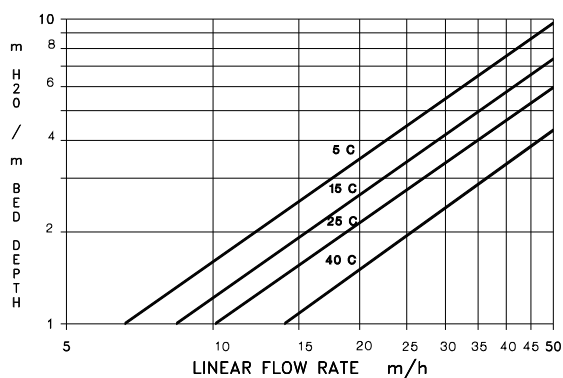


Fig. 2 PRESSURE DROP IN WATER



<b>RECOMMENDED NaOH QUALITY FOR REGENERATION (*)</b>			
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 <sub>2</sub>	Suspended solids	0 ppm
(*) Values referred to NaOH 100%.			

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