

# water

## RESINDION RESINS FOR WATER TREATMENTS

TDS08034

RELITE 3AS - Strongly Basic Resin

TDS 08034

### RELITE 3AS

RELITE 3AS is a "TYPE I" porous type strongly basic anion exchange resin.

Its main characteristics are high basicity, good exchange kinetics and resistance to mechanical, thermal, osmotic shocks. Besides, beads are particularly uniform.

RELITE 3AS 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.

The main application of this product is the water and organic solutions demineralization.

### 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	mm
Effective size	:	0.40 min	mm
Uniformity Coefficient	:	1.5	max
Ionic form at the delivery	:	Cl <sup>-</sup>	
Volume change	:	+ 20 max	% Cl <sup>-</sup> → OH <sup>-</sup> form
Total exchange capacity	:	1.2 min	eq/l
Water retention	:	52 ÷ 60	%
Chemical stability	:	Stable in the whole pH range	
Thermal stability	:	60 °C max (OH <sup>-</sup> );	80 °C max (Cl <sup>-</sup> )
Shipping density	:	700	g/l approx.
Standard packaging	:	25 or 1000	liter bags

### RECOMMENDED OPERATING CONDITIONS

Operating pH range	:	1 ÷ 14	
Operating temperature range	:	5 ÷ 60	°C
Minimum bed depth	:	800	mm
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

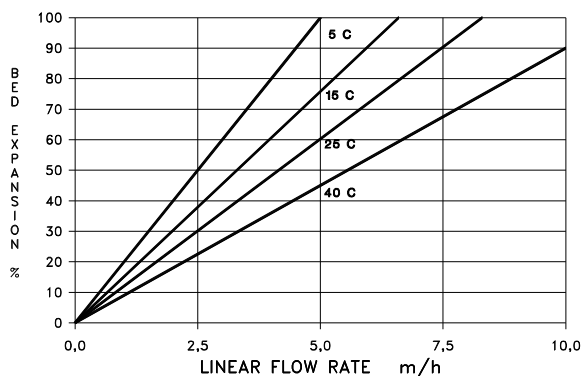
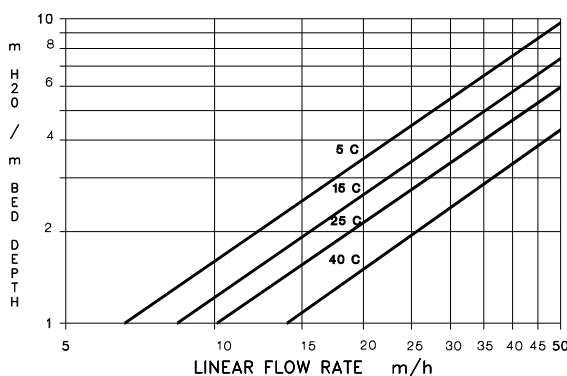


Fig. 2 PRESSURE DROP IN WATER



<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%.			