

food

RESINDION RESINS FOR FOOD TREATMENTS

TDS 06042

Product Information

RELITE CNS - Weakly Acidic Resin

TDS 06042

RELITE CNS

RELITE CNS is a new porous type weakly acidic cation exchange resin with a structure based on an acrylic matrix.

RELITE CNS shows a very high operating capacity associated to a relatively small volume change in front of monovalent ionic forms. The exchange kinetics and mechano-osmotic resistance are very good; therefore, this product can be applied in all cases where very high performances in hardness removal from sugars and organic solutions are requested, applying the resin in both hydrogen or monovalent ionic forms.

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

TYPICAL CHARACTERISTICS

Matrix	:	Porous copolymer acrylate-DVB			
Functional group	:	Carboxylic			
Colour and physical form	:	White yellowish translucent/opaque beads			
Particle size range	:	0.425 ÷ 1.18	m m		
Effective size	:	0.40 min	m m		
Uniformity Coefficient	:	1.6	max		
Ionic form at the delivery	:	H ⁺			
Volume change	:	+ 50 % max	H ⁺ --> Na ⁺ form	+ 10 % max	H ⁺ --> Ca ⁺⁺ form
Total exchange capacity	:	4.2 min	eq/l		
Water retention	:	45 ÷ 52	%		
pH stability range	:	0 ÷ 14			
Operating pH range	:	5 ÷ 14			
Operating temperature	:	120 °C	max		
Shipping density	:	800	g/l approx.		
Standard packaging	:	25 ÷ 50	liter bags		

RECOMMENDED OPERATING CONDITIONS

Minimum bed depth	:	800	m m			
Linear operating flowrate	:	2 ÷ 50	m/h			
Backwash expansion	:	50 ÷ 80	%			
Regenerants	:	HCl	H ₂ SO ₄	NaOH	NH ₄ OH	Na ₂ CO ₃
Regenerant level range	:	40 ÷ 200	55 ÷ 270	180 ÷ 230	150 ÷ 200	230 ÷ 300
Concentration range	:	1 ÷ 5	0.7 ÷ 5	2 ÷ 3	1.5 ÷ 3	5 ÷ 7
Slow rinse volume	:	1.5 ÷ 2	1.5 ÷ 2	1.5 ÷ 2	1.5 ÷ 2	1.5 ÷ 2
Fast rinse volume	:	3 ÷ 5	3 ÷ 5	3 ÷ 5	3 ÷ 5	3 ÷ 5
						g/l
						%
						BV
						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

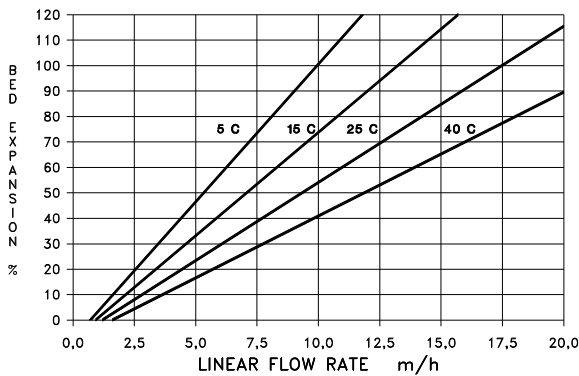
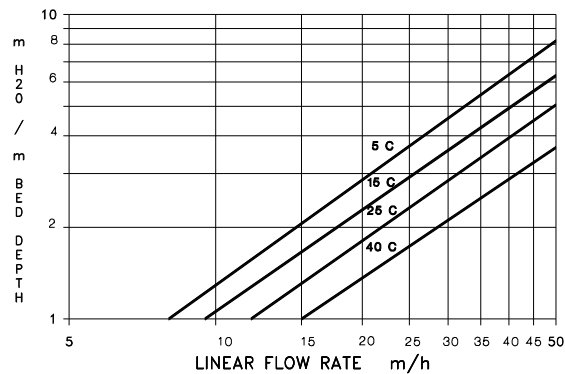


Fig. 2 PRESSURE DROP IN WATER



RECOMMENDED HCl QUALITY FOR REGENERATION (*)	
Suspended solids	0 ppm
Chlorine	10 ppm
Iron	20 ppm
Heavy metals	10 ppm
Sulphates	5000 ppm

(*) Values referred to HCl 100%.

RECOMMENDED H ₂ SO ₄ QUALITY FOR REGENERATION (*)		
Purity	95	%
Suspended solids	0	ppm
Iron	50	ppm
Arsenic	5	ppm
Lead	5	ppm

(*) Values referred to H₂SO₄ 100%.

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

(*) Values referred to NaOH 100%.