

# EURORESIN SAP1-FG

ION EXCHANGE RESIN FOR FOOD APPLICATIONS

## PRODUCT INFORMATION

### Strongly basic macro-porous resin

EURORESIN SAP1-FG is a macro-porous strong base type I anion exchange resin with a styrene-DVB copolymer matrix with quaternary ammonium groups. It has excellent physical and chemical properties, high operating capacity, lower pressure drop, well physical and chemical stability.

Its macro-porous structure makes it particularly suitable for the demineralization and discoloration processes of fruit juices and sugar solutions. EURORESIN SAP1-FG has selected particle size and high mechanical resistance in order to reduce the pressure drop.

### CHARACTERISTICS

<b>Chemical structure</b> .....	Copolymer styrene-DVB
<b>Type</b> .....	Macroporous strong basic type I anion resin
<b>Physical form</b> .....	White opaque spherical beads
<b>Functional group</b> .....	quaternary ammonium R-N+(CH <sub>3</sub> ) <sub>3</sub> X-
<b>Ionic form at delivery</b> .....	Chloride Cl-
<b>Total capacity</b> .....	> 1,2 meq/ml
<b>Water retention</b> .....	57 – 67 %
<b>Particle size</b> .....	0,425 – 1,18 mm
<b>Density</b> .....	670 – 730 g/l
<b>Reversible swelling</b> <b>Cl-OH-</b> .....	20 % max
<b>Max operating temperature</b> <b>Cl- form</b> .....	100 °C
<b>OH- form</b> .....	60 °C
<b>Stability</b> .....	pH 1 - 14
<b>Package</b> .....	25 l bag

### OPERATING CONDICTION

<b>Specific flow rate</b> .....	5 – 50 l/h/l resin
<b>Linear flow rate</b> .....	5 – 50 m/h
<b>Bed expansion</b> .....	min 50%
<b>Regenerant</b> .....	Solution NaOH 4 – 8%
<b>Regenerant level</b> .....	40 – 150 g NaOH 100%/l resin
<b>Regenerant flow rate</b> .....	3 – 5 l/h/l resin
<b>Regeneration contact time</b> .....	30 minutes
<b>Slow rinse flow rate</b> .....	3 – 5 l/h/l resin
<b>Slow rinse volume</b> .....	1,5 resin volumes
<b>Fast rinse flow rate</b> .....	5 – 50 l/h/l resin
<b>Fast rinse volume</b> .....	5 resin volumes
<b>Minimum bed depth</b> .....	800 mm

**EURORESIN CTC® S.r.l.**

Via dei Platani, 635 • 26034 PIADENA DRIZZONA (CR) • Tel 0375.980133 • Cell. 335.6386094  
e-mail: pncsrls@gmail.com • Technical dept: +39 3357867342

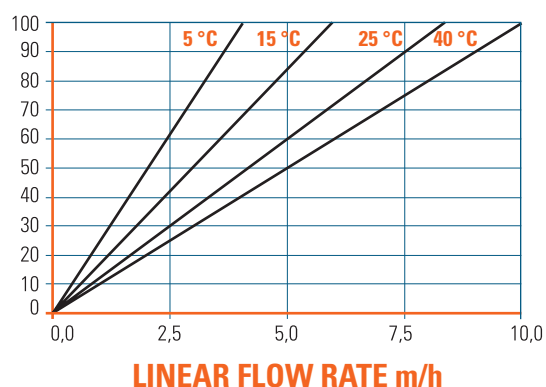
# EURORESIN SAP1-FG

ION EXCHANGE RESIN FOR FOOD APPLICATIONS

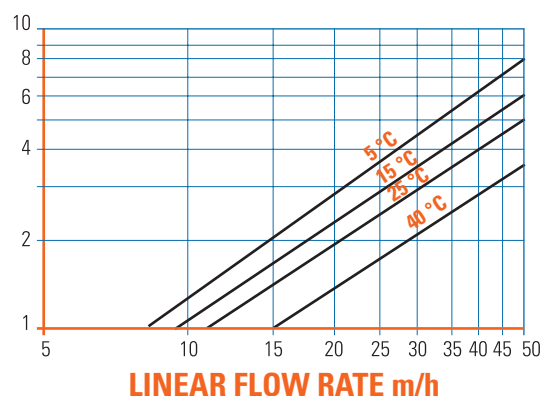
## PROPERTY

Operating capacity depends on various parameters, such as inlet composition, endpoint, kinetic load and regenerant level.

### BED EXPANSION IN WATER



### PRESSURE DROP IN WATER



### RECOMMENDED NaOH QUALITY FOR REGENERATION (\*)

Silica .....	10 ppm
Iron .....	10 ppm
Mercury .....	2 ppm
Heavy metals .....	5 ppm
Chlorates .....	10 ppm as O <sub>2</sub>
Sodium carbonate .....	0,5 %
Sodium chloride .....	0,5%
Sodium sulphate .....	0,2%
Hardness .....	0 ppm
Suspended solids .....	0 ppm

(\*) Values referred to NaOH 100%

### RECOMMENDED NaCl QUALITY FOR REGENERATION

Purity .....	97 % min.
Moisture .....	2 % max
Suspended solids .....	0 %
Ca <sup>++</sup> + Mg <sup>++</sup> .....	0,5 % max
Sulphates .....	1 % max
Soluble iron .....	0 %
Alkalinity .....	0,001max ppm CaCO <sub>2</sub>

## OTHER APPLICATIONS

- Water treatment
- Liquid sugar decolorization
- Pharmaceutical industry
- Metallurgical industry

**EURORESIN CTC® S.r.l.**

Via dei Platani, 635 • 26034 PIADENA DRIZZONA (CR) • Tel 0375.980133 • Cell. 335.6386094  
e-mail: pncsrsls@gmail.com • Technical dept: +39 3357867342