

## WATER TREATMENT SOLUTION

### DESCRIPTION

DYNASPHER SA1U-WT high quality gel strong anion resin type I with styrene-divinylbenzene matrix with uniform particle size designed specifically for use in industrial demineralization as well as condensate polishing with high performance required. With its stable chemical and physical properties, the resin is able to yield excellent operation capacity with low pressure drop. It has the ability to achieve low residual silica levels. DYNASPHER SA1U-WT shows high regenerative efficiency. On mixed bed the separation of cation and anion resin is very easy and it reduce the possibility of contamination of cation and anion.

### SYSTEM DESIGN

Co - current / Counter current / Floating bed / Blocked bed / Layered bed / mixed bed

#### PRINCIPAL APPLICATIONS

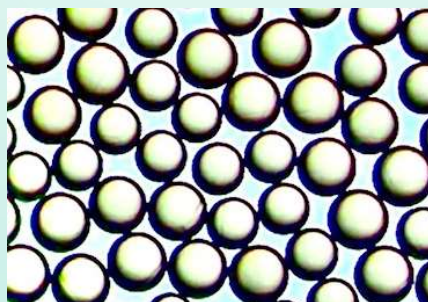
- Water demineralization
- Condensate
- Food
- Pharmaceutical
- Metallurgical

#### REGULATORY

- F.D.A. – CFR 21 – 173.25
- Codes Alimentarius – Inventory of Processing Aids – CAC/MISC3
- European Resolution AP (97) – 1 regarding the TOC (Total Organic Carbon) released according AFNOR method (method T90 – 601)

#### TYPICAL PACKAGING

- 1 ft<sup>3</sup> Sack
- 25 lt Sack
- 5 ft<sup>3</sup> Drum (Fiber)
- 1 m<sup>3</sup> Supersack
- 42 ft<sup>3</sup> Supersack



PRODUCT INFORMATION  
**DYNASPHER SA1U-WT**  
GEL STRONG ANION RESIN TYPE I

## TYPICAL CHARACTERISTICS

### PHYSICAL CHARACTERISTICS

Copolymer	Polystyrene Crosslinked - DVB
Matrix	Gelulare
Type	Strong anion type I
Functional Group	Trimethylamine
Physical Form	Yellowish brown transparent beads

### CHEMICAL CHARACTERISTICS

Ionic Form as Shipped	Cl <sup>-</sup>
Total Exchange Capacity	≥ 1.2 eq/lit (Cl <sup>-</sup> form)
Water Retention	51.0-58.0 % (Cl <sup>-</sup> form)

### PARTICLE SIZE

Particle size range	0.6 mm ± 0.05 mm
Uniformity Coefficient	≤ 1.1
< 300 µm	≤ 0.5 %
> 1180 µm	≤ 0.5 %

### STABILITY

Whole Uncracked Beads	≥ 98 %
Swelling	Cl <sup>-</sup> → OH <sup>-</sup> + 25% max

### DENSITY

Particle Density	1.060-1.110 g / ml
Shipping Weight	660-750 g / lt

For additional size in formation, please refer to the our Technical Dept.

### SUGGESTED OPERATING CONDICTIONS

Termal stability	60 °C (140 °F) max OH <sup>-</sup> - 80 °C (176 °F) max Cl <sup>-</sup>
Chemical stability	0 - 14
Service Cycle	1 - 14
Minimum bed depth	800 mm

For additional praticle size information regarding recommended minimum bed depth, operating conditions, and regeneration conditions for Layered or Mixed bed, please refer to our tecnical dept.

# PRODUCT INFORMATION

## DYNASPHER SA1U-WT

### GEL STRONG ANION RESIN TYPE I

## HYDRAULIC CHARACTERISTICS

Estimated bed expansion of DYNASPHER SA1U-WT as a function of backwash flowrate and temperature is shown in figure 1.

Estimated pressure drop for DYNASPHER SA1U-WT as a function of service flowrate and temperature is shown in figure 2.

These pressure drop expectations are valid at the start of the service run with clean water and well – classified bed.

Figure 1: Back wash expansion  
Temperature = 5 °C - 35 °C (41 °F - 95 °F)

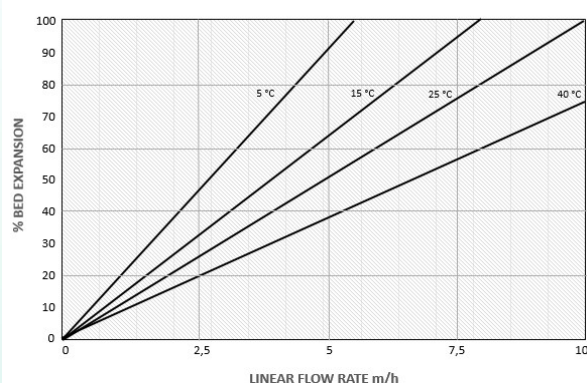
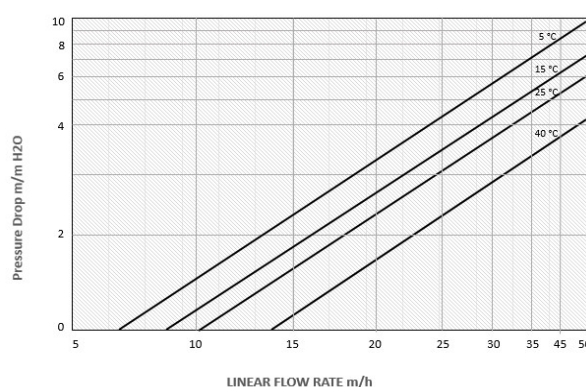


Figure 2: Pressure Drop  
Temperature = 5 °C - 40 °C (41 °F - 104 °F)



## CUSTOMER NOTICE

### STORAGE

It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions without exposure to direct sunlight. If resin should become frozen, it should not be mechanically handled and left to thaw out gradually at ambient temperature. It must be completely thawed before handling or use. No attempt should be made to accelerate the thawing process.

### DISPOSAL

In the European Community ion exchange resins have to be disposed, according to the European waste nomenclature which can be accessed on the internet – site of the European Union.

### TOXICITY

The safety data sheet must be observed. It contains additional data on product description, transport, storage, handling, safety and ecology.

### WARNING

Oxidizing agents such as nitric acid attack organic ion exchange resins under certain conditions. This could lead to anything from slight resin degradation to a violent exothermic reaction (explosion). Before using strong oxidizing agents, consult sources knowledgeable in handling such materials.