PRODUCT INFORMATION

DYNASPHER PC240H-F

STRONGLY ACID POROUS CATION RESIN

FOOD TREATMENT SOLUTION

DESCRIPTION

DYNASPHER PC240H-F is a macro porous strong acid cation exchange resin, supplied in H^+ form.
It is a copolymer of styrene and DVB with sulphonic acid exchange groups. Its high degree of crosslinking provides exceptional stability, which gives it great resistance to chemical oxidation and to mechanical, thermal, or osmotic stress.
DYNASPHER PC240H-F is mainly used sugars, grape, apple and others fruit juice demineralization and decolorization.

SYSTEM DESIGN

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

PRINCIPAL APPLICATIONS

- Fruit juices demineralization
- Sugars
- Milk whey
- Pharmaceutical
- Nutraceutical
- Metallurgical
- water

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) realeased according AFNOR method (method T90 – 601)

TYPICAL PACKAGING

- 1 ft³ Sack
- 25 lt Sack
- 5 ft³ Drum (Fiber)
- 1 m³ Supersack
- 42 ft³ Supersack

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TYPICAL CHARAPTERISTICS

PHYSICAL CHARAPTERISTICS

Copolymer	Polystyrene DVB
Matrix	Macroporous
Type	Strong acid cation
Functional Group	Sulfonic acid
Physical Form	Gray brown opaque spherical beads

CHEMICAL CHARAPTERISTICS

Ionic Form as Shipped	H+
Total Exchange Capacity	≥ 1.8 eq/lt
Water Retention	45.0-55.0 %

PARTICLE SIZE

Particle Diameter	0.425 -1.25 mm
Uniformity Coefficient	< 1.6
< 300 µm	≤ 0.1 %
> 1180 µm	≤ 3.0 %

STABILITY

Whole Uncracked Beads	≥ 98 %
Swelling	Na+ ⟶ H+ +7 %

DENSITY

Particle Density	1.23 - 1.28 g / ml
Shipping Weight	750 - 850 g / lt

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

SUGGESTED OPERATING CONDICTIONS

Temperature Range (Na+ Form)	5 - 150 °C (41 - 302 °F)
pH Range	1 - 14
Service Cycle	1 - 14
Stable	0 - 14

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.

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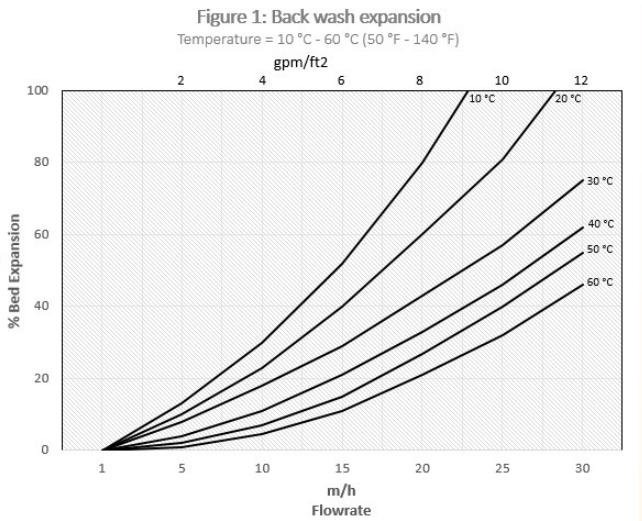
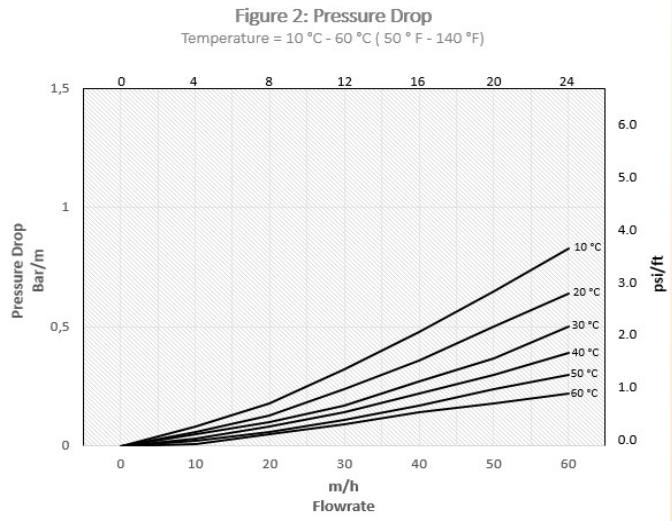
HYDRAULIC CHARACTERISTICS

Estimated bed expansion of DYNASPHER PC240H-F as a function of backwash flowrate and temperature is show in figure 1.

Estimated pressure drop for DYNASPHER PC240H-F as a function of service flowrate and temperature is show in figure 2.
These pressure drop expectations are valid at the start of the service run with clean water and well – classified bed.





CUSTOMER NOTICE

STORAGE

It is recommended to store ion exchange resins at temperatures above the freezing point of water under roof in dry conditions whithout 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.