

FOOD TREATMENT SOLUTION

DESCRIPTION

DYNASPHER CH710-ID is a macro porous selective ion exchange resin for heavy metal removal with iminodiacetate active group. DYNASPHER CH710-ID is suitable for Iron and heavy metal removal in water and food processes. It is mainly used for the removal of iron and copper that may be present in grape juices or wine. It has high chemical physical stability and excellent regenerative efficiency, the selected particle size and the high ion exchange kinetics allow the use of the resin even with concentrated solutions.

SYSTEM DESIGN

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

PRINCIPAL APPLICATIONS

- Fruit Juices
- Sugars
- Pharmaceutical industry
- Potable 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) released according AFNOR method (method T90 – 601)

TYPICAL PACKAGING

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



PRODUCT INFORMATION
DYNASPER CH710-ID
IMINODIACETIC CHELANTING RESIN

TYPICAL CHARACTERISTICS

PHYSICAL CHARACTERISTIC

Copolymer	Polystyrene Crosslinked-DVB
Matrix	Highly porous
Type	Chelanting
Functional group	Iminodiacetate
Physical form	White yellowish brown spherical beads

CHEMICAL CHARACTERISTICS

Ionic form as shipped	Na ⁺
Total Exchange Capacity	≥ 2.0 eq/lit
Water Retention	50.0 - 60.0 %

PARTICLE SIZE

Particle Diameter	0.315 - 1.250 mm
Uniformity Coefficient	≤ 1.5
< 300 μm	≤ 1.0 %
> 1180 μm	≤ 1.0 %

STABILITY

Whole uncracked beads	≥ 98 %
Swelling	Na ⁺ → H ⁺ - 30% max

DENSITY

Particle Density	1.06 - 1.10 g/ml
Shipping Weight	710 - 745 g/lit

SUGGESTED OPERATING CONDITIONS

Temperature Range (Na ⁺ Form)	5 - 160 °C (41 - 320 °F)
pH Range	0 - 14
pH Stability	0 - 14

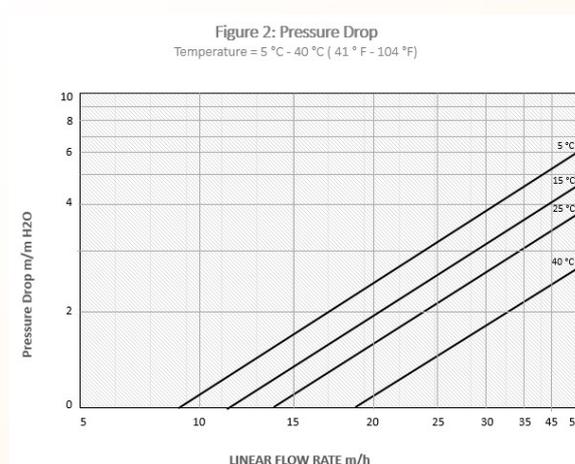
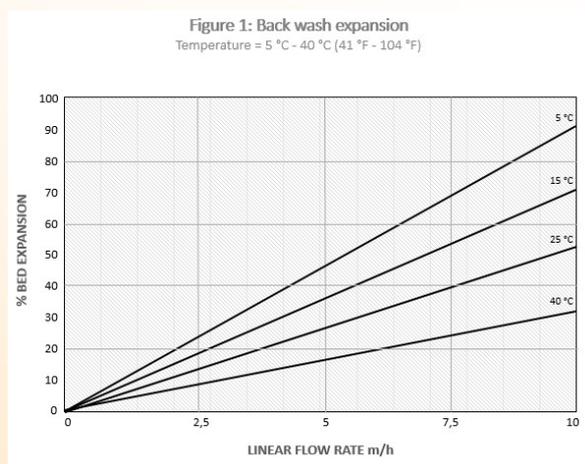
For additional size information, please refer to our Technical Dept.

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

HYDRAULIC CHARACTERISTICS

Estimated bed expansion of DYNASHER CH710-ID as function of backwash flowrate and temperature is show in figure 1.

Estimated pressure drop for DYNASHER CH710-ID 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 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.