

Product Data Sheet

DIAION™ WA10

DIAION™ WA10 is an acrylic type weakly basic anion exchange resin. It has tertiary amine functionality with high regeneration efficiency. A wide range of applications, especially in a field of pretreatment of starch hydrolysates containing purification of dextrose, beet sugar solutions, and formaldehyde, is recommended.

Product

| | |
|------------------|------------------|
| Grade Name | DIAION™ WA10 |
| Type | Weak Base Anion |
| Matrix | Acrylic-DVB, Gel |
| Functional Group | Tertiary Amine |
| Ionic Form | Free Base |

Specification

| | | |
|--|--------|-----------|
| Whole Bead Count | - | 90 min. |
| Total Exchange Capacity | meq/mL | 1.2 min. |
| Water Content | % | 63 - 69 |
| Particle Size Distribution on 1180 µm | % | 5 max. |
| Particle Size Distribution thr. 300 µm | % | 1 max. |
| Effective Size | mm | 0.35 min. |
| Uniformity Coefficient | - | 1.6 max. |

Typical Properties

| | | |
|---|------|------|
| Shipping Density | g/L | 690 |
| Mean Particle Size | µm | 510 |
| Particle Density | g/mL | 1.05 |
| Total Swelling (FB to Cl ⁻) | % | 22 |

Recommended Operating Conditions

| | | |
|-------------------------------|-----------------|------------|
| Maximum Operating Temperature | °C | 60 |
| Operating pH Range | | 0 - 9 |
| Minimum Bed Depth | mm | 800 |
| Service Flow Rate | m/h | 10 - 40 |
| Regenerant | | NaOH |
| Regenerant Concentration | % | NaOH 1 - 4 |
| Regenerant Level | % of ionic load | 120 |
| Regenerant Flow Rate | m/h | 2 - 6 |
| Total Rinse Requirement | BV | 5 - 10 |



Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ WA10 resin in normal down flow operation is shown in the graphs below.

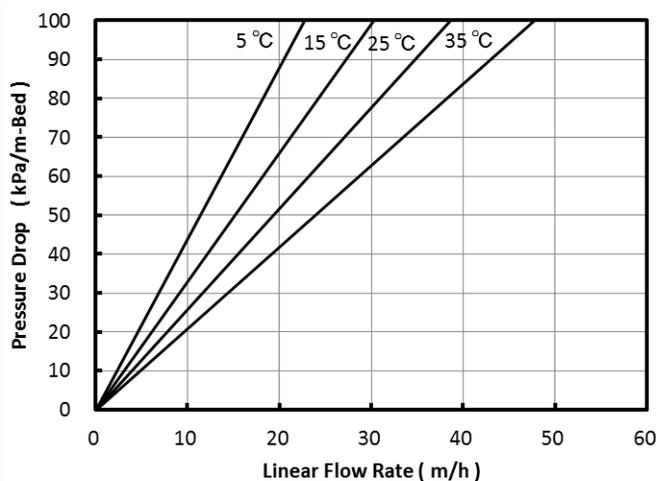


Fig. 1 Pressure Drop of WA10

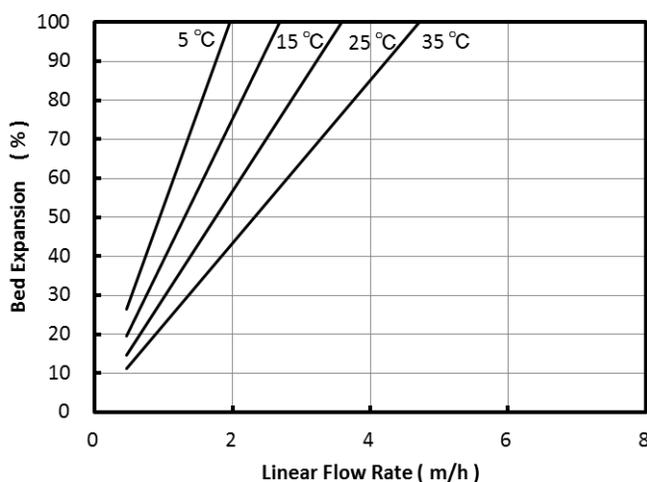


Fig. 2 Bed Expansion of WA10

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