

## Product Data Sheet

**DIAION™ HPA25M**

DIAION™ HPA25M is a highly porous type strongly basic anion exchange resin. It has a higher cross-linkages and higher porous properties. A wide range of applications, especially in a field of enzyme purification as enzyme carriers and industrial separation of large molecules, is recommended.

**Product**

|                  |                                    |  |
|------------------|------------------------------------|--|
| Grade Name       | DIAION™ HPA25M                     |  |
| Type             | Strong Base Anion                  |  |
| Matrix           | Styrene-DVB, Highly Porous         |  |
| Functional Group | Type I (trimethyl ammonium groups) |  |
| Ionic Form       | Cl <sup>-</sup>                    |  |

**Specification**

|  |        |           |
|--|--------|-----------|
| Whole Bead Count                       | -      | 95 min.   |
| Salt Splitting Capacity                | meq/mL | 0.5 min.  |
| Water Content                          | %      | 58 - 68   |
| Particle Size Distribution thr. 250 µm | %      | 5 max.    |
| Effective Size                         | mm     | 0.25 min. |
| Uniformity Coefficient                 | -      | 1.6 max.  |

**Typical Properties**

|  |      |      |
|--|------|------|
| Shipping Density                                     | g/L  | 690  |
| Mean Particle Size                                   | µm   | 390  |
| Particle Density                                     | g/mL | 1.06 |
| Total Swelling (Cl <sup>-</sup> to OH <sup>-</sup> ) | %    | 10   |

**Recommended Operating Conditions**

|                               |     |  |
|-------------------------------|-----|--|
| Maximum Operating Temperature | °C  | 80 (Cl <sup>-</sup> )<br>60 (OH <sup>-</sup> ) |
| Operating pH Range            |     | 0 - 14   |
| Minimum Bed Depth             | mm  | 800  |
| Service Flow Rate             | m/h | 10 - 60  |
| Regenerant                    |     | NaOH   |
| Regenerant Concentration      | %   | NaOH 2 - 8                                     |
| Regenerant Level              | g/L | 50 - 200                                       |
| Regenerant Flow Rate          | m/h | 2 - 8  |
| Total Rinse Requirement       | BV  | 2 - 10   |



## Hydraulic Characteristics

The approximate pressure drop at various temperatures and flow rates for each meter of bed depth of DIAION™ HPA25M resin in normal down flow operation is shown in the graphs below.

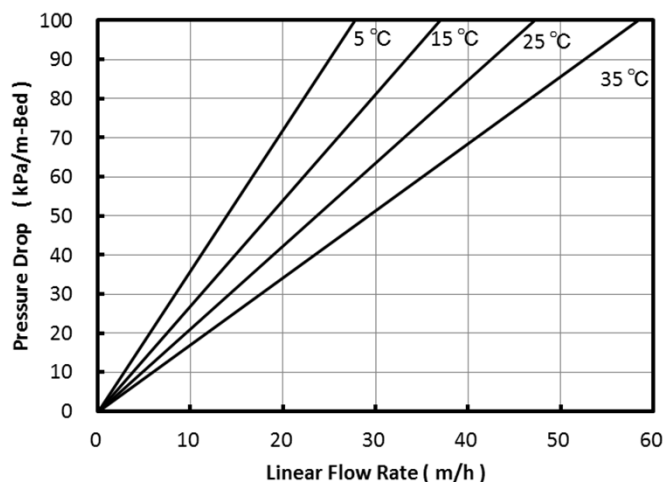


Fig. 1 Pressure Drop of HPA25M

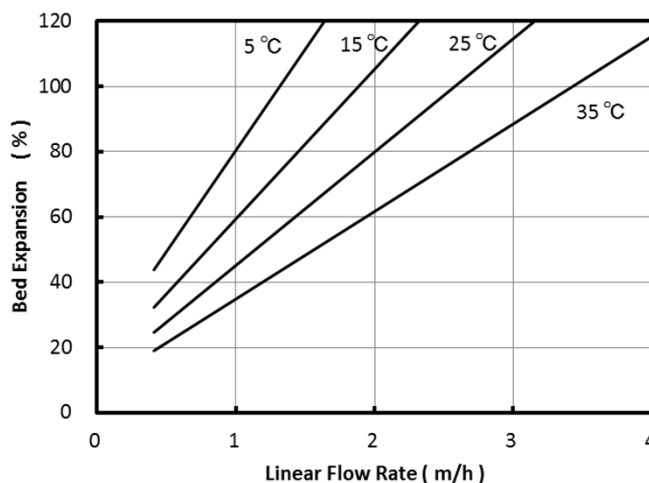


Fig. 2 Bed Expansion of HPA25M

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