



Tel: +44 (0) 1706 869777  
E-mail: [sales@desal.co.uk](mailto:sales@desal.co.uk)  
Web: [www.desal.co.uk](http://www.desal.co.uk)

## DOWEX™ MONOSPHERE™ 600BB Inert Resin

A Uniform Particle Size Inert Resin for use in Mixed Bed Demineralization and Condensate Polishing Applications

| Product                  | Type  | Matrix                          | Functional group |
|--------------------------|-------|---------------------------------|------------------|
| DOWEX™ MONOSPHERE™ 600BB | Inert | Styrene-DVB-acrylate terpolymer | None             |

### Guaranteed Sales Specifications

|                               |    |  |             |
|-------------------------------|----|--|-------------|
| Bead size distribution range† |    |  |             |
| Mean particle size            | µm |  | 600 ± 50    |
| Uniformity coefficient, max.  |    |  | 1.1         |
| Specific gravity @ 77°F       |    |  | 1.14 - 1.16 |

### Typical Physical and Chemical Properties

|                   |         |  |      |
|-------------------|---------|--|------|
| Particle density  | g/mL    |  | 1.15 |
| Shipping weight** | g/L     |  | 670  |
|                   | lbs/ft³ |  | 42   |

### Recommended Operating Conditions

- Maximum operating temperature 60°C (140°F)
- pH range 0 - 14
- Bed depth, min. 150 mm (0.5 ft)

### Typical Properties and Applications

DOWEX MONOSPHERE 600BB inert resin is a non-functionalized resin used to enhance separation of mixed beds during regeneration. Its density is between the densities of strong acid cation exchange resin and strong base anion exchange resin. It also has a tightly controlled, uniform particle size. These combined properties ensure the terminal settling velocity is intermediate to that of the cation and anion resins creating an inert "Buffer Zone" between the functional resins following backwash. Separation of the two functional components of a mixed bed reduces the risk of crossregeneration, improving water quality and reducing rinse time.

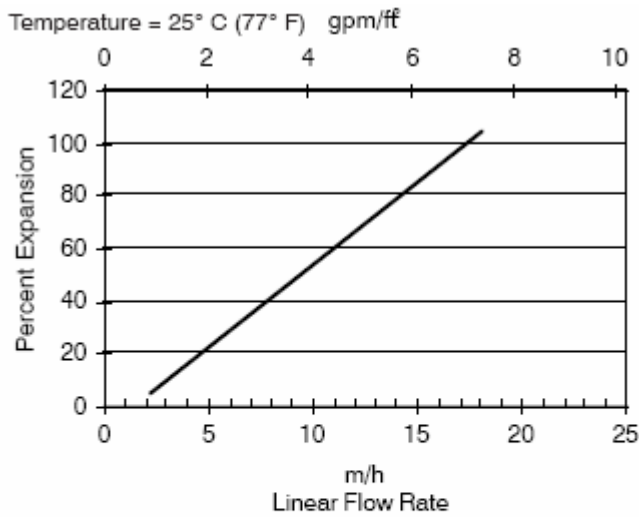
### Packaging

25 liter bags or 5 cubic foot fiber drums

† For additional particle size information, please refer to Particle Size Distribution Cross Reference Chart (Form No. 177-01775)

\*\* As per the backwashed and settled density of the resin, determined by ASTM D-2187.

Figure 1. Backwash Expansion Data



**For other temperatures use:**

$$F_T = F_{77°F} [1 + 0.008 (T_F - 77)], \text{ where } F \equiv \text{gpm/ft}^2$$

$$F_T = F_{25°C} [1 + 0.008 (1.8T_C - 45)], \text{ where } F \equiv \text{m/h}$$

**DOWEX™ Ion Exchange Resins**

For more information about DOWEX resins, call the Dow Water Solutions business:

North America: 1-800-447-4369  
 Latin America: (+55) 11-5188-9222  
 Europe: (+32) 3-450-2240  
 Pacific: +60 3 7958 3392  
 Japan: +813 5460 2100  
 China: +86 21 2301 9000

<http://www.dowwatersolutions.com>

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.

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