



## Product Data Sheet

### TapTec™ HP333 H Ion Exchange Resin

Drinking Water-grade, Weak Acid Cation Exchange Resin for Hardness Removal

#### Description

TapTec™ HP333 H Ion Exchange Resin is a weak acid cation exchange resin containing carboxylic groups on an acrylic matrix. It combines a high exchange capacity with a smaller volume variation than conventional carboxylic resins.

TapTec™ HP333 H is designed for cartridge applications where temporary hardness is removed from tap water for use in cooking or making tea and coffee.<sup>1</sup> It also removes heavy metals and is widely used to improve the taste of water.<sup>1</sup>

TapTec™ HP resins are manufactured especially for potable water treatment.

<sup>1</sup> Not performance tested or certified by a third party certifying body

#### Properties

<b>Physical Properties</b>	
Copolymer	Crosslinked acrylic
Matrix	Macroporous
Type	Weak acid cation
Functional Group	Carboxylic acid
Physical Form	Yellow, opaque, spherical beads
<b>Chemical Properties</b>	
Ionic Form as Shipped	H <sup>+</sup>
Total Exchange Capacity	≥ 3.85 eq/L
<b>Particle Size</b> §	
Particle Diameter	500 – 700 µm
< 300 µm	≤ 0.5%
< 400 µm	≤ 10.0%
> 1180 µm	≤ 3.0%
<b>Purity</b>	
Color Throw, as packaged	≤ 20 APHA units
<b>Stability</b>	
Whole Uncracked Beads	≥ 90%
Swelling	Ca <sup>2+</sup> → Na <sup>+</sup> : 5%
<b>Density</b>	
Particle Density	1.140 – 1.180 g/mL
Shipping Weight	685 g/L

§ For additional particle size information, please refer to the [Particle Size Distribution Cross Reference Chart](#) (Form No. 45-D00954-en).

## Application Information

### Performance

TapTec™ HP333 H Ion Exchange Resin will remove temporary hardness (bicarbonate alkalinity) from over 450 bed volumes of tap water having 5 meq/L alkalinity (250 ppm as CaCO<sub>3</sub>) and from 1100 bed volumes having 2 meq/L alkalinity (100 ppm as CaCO<sub>3</sub>). These volumes are indicated for an alkalinity leakage end point of 50%.

### Conditioning

TapTec™ HP333 H Ion Exchange Resin is ready to use.<sup>2</sup> When using a new cartridge for the first time, TapTec™ HP333 H will comply with regulations after being rinsed with 20 bed volumes of water (i.e., 2 L of water for a cartridge containing 100 mL of resin). No other treatment will be required by the user.

<sup>2</sup> This is valid only if:

- the resin is stored at a temperature of less than 25°C and protected from UV radiation
- the storage time between production date (printed on the bags) and final use does not exceed 6 months

### Cartridge Design

Appropriate cartridge design will have to take care of:

- maintaining the resin in a moist state
- keeping contamination under control

## Product Stewardship

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Please be aware of the following:

- **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.

## Regulatory Note

This product may be subject to drinking water application restrictions in some countries; please check the application status before use and sale.

**Have a question? Contact us at:**

[www.dupont.com/water/contact-us](http://www.dupont.com/water/contact-us)

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