Product Data Sheet

# AMBERLITE™ FPC336 H Ion Exchange Resin

Weak Acid Cation Exchange Resin

## Description

AMBERLITE™ FPC336 H Ion Exchange Resin is a weak acid cation exchange resin containing carboxylic groups on an acrylic matrix. It is characterized by a high exchange capacity combined with a smaller volume variation than conventional carboxylic resins.

AMBERLITE FPC336 H is designed for potable water dealkalization and treatment of waters used in the food industry.

## Typical Properties

| | |
|---|---|
| **Physical Properties** | |
| Copolymer | Polyacrylic |
| Matrix | Macroporous |
| Type | Weak acid cation |
| Functional Group | — $COOH^-$ |
| Physical Form | Yellow, opaque, spherical beads |
| **Chemical Properties** | |
| Ionic Form as Shipped | $H^+$ |
| Total Exchange Capacity | ≥ 3.90 eq/L |
| Water Retention Capacity | 54 – 58% |
| **Particle Size** [§] | |
| Particle Diameter | 550 – 750 µm |
| Uniformity Coefficient | ≤ 1.9 |
| < 300 µm | ≤ 3.0% |
| > 1180 µm | ≤ 5.0% |
| **Stability** | |
| Swelling | $H^+ \rightarrow Na^+$ : ~ 60% |
| Chemical Resistance | Sensitive to oxidants; maximum 0.1 – 0.2 ppm in the inlet water |
| **Density** | |
| Particle Density | 1.17 – 1.18 g/mL |
| Shipping Weight | 700 g/L |

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



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## Suggested Operating Conditions

| | | |
|---|---|---|
| Bed depth, max. | 700 mm (2.3 ft) | |
| Flowrates | | |
| Service | 5 – 40 BV*/h | |
| Regeneration | | |
| HCl | 2 – 8 BV/h | |
| $H_2SO_4$ | 2 – 8 BV/h | |
| Contact Time | | |
| Regeneration | ≥ 30 minutes | |
| Rinse Requirements | ~ 10 BV | |
| Regenerant | HCl | $H_2SO_4$ |
| Concentration | 2 – 5% | 0.5 – 0.8% |
| Level | 110% | 110% |

* 1 BV (Bed Volume) = 1 $m^3$ solution per $m^3$ resin or 7.5 gal solution per $ft^3$ resin

## Start-up

AMBERLITE™ FPC336 H Ion Exchange Resin is ready to use. All that is required at the time of commissioning is a 20-bed volume rinse with the water to be treated. This is valid only if the resin is stored at a temperature of less than 25°C and protected from UV radiation and if the storage time between the production date (printed on the packaging) and use does not exceed 6 months.

## Product Stewardship

DuPont has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with DuPont products—from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

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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.



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

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