GENERAL TECHNOLOGIES, SPC

- High-Quality Services & Products

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PAR-OH Ion Exchange Resin
High Purity Strongly Basic

Product Description

PAR-H is a high-purity powdered strong basic anion exchange resin. It's designed for high-flow, pre-coat condensate polishing demineralizers for utility power plant applications, as well as for other commercial or industrial water demineralization treatment systems.

The product provides very high exchange capacity, high purity level and low impurity content level.

PAR-H 's particle size is 30-150µm which provides large surface area. This is an advantage that permits much better kinetics performance of excellent exchange efficiency and filtration ability.

Typical Physical, Chemical & Operating Characteristics

ITEMS		DATA
Matrix		Powdered Polystyrene-DVB
Physical Form & Color		Powdered, light yellow
Functional Group		$R\text{-}N^{+}(CH_3)_3$
Ionic Form		OH^{-}
Shipping Weight g/ml		0.4-0.5
Moisture Contents %		<65
Total Exchange Capacity mmol/g		≥3.60
Shipping Weight g/ml		0.4-0.5
Conversion to Ionic Form H^{+}%		≥94.0
Performance		**Powder**
Particle Size	30-150µm %	≥95.0
	>200 µm %	≤2.0
	>10 µm %	≤2.0

Chemical and Thermal Stability

PAR-(H) resin is insoluble in dilute or moderately concentrated acids, alkalies, and in all common solvents. However, exposure to significant amounts of free chlorine, “hypochlorite” ions, or other strong oxidizing agents over long periods of time will eventually break down the cross-linking.

This will tend to increase the moisture retention of the resin, decreasing it s mechanical strength, as well as generating small amounts of extractable breakdown products. Like all conventional Polystyrene Type I anion resins, it is thermally stable to 77°C (170 °F) in the salt form. The hydroxide form tends to degrade in water temperatures appreciably higher than 60 °C (140 °F), thereby losing capacity, as the functional groups are gradually replaced by hydroxyl groups.