DuPont Water Solutions
Life Sciences and Specialties

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Tip Sheet:
What does that price really mean?

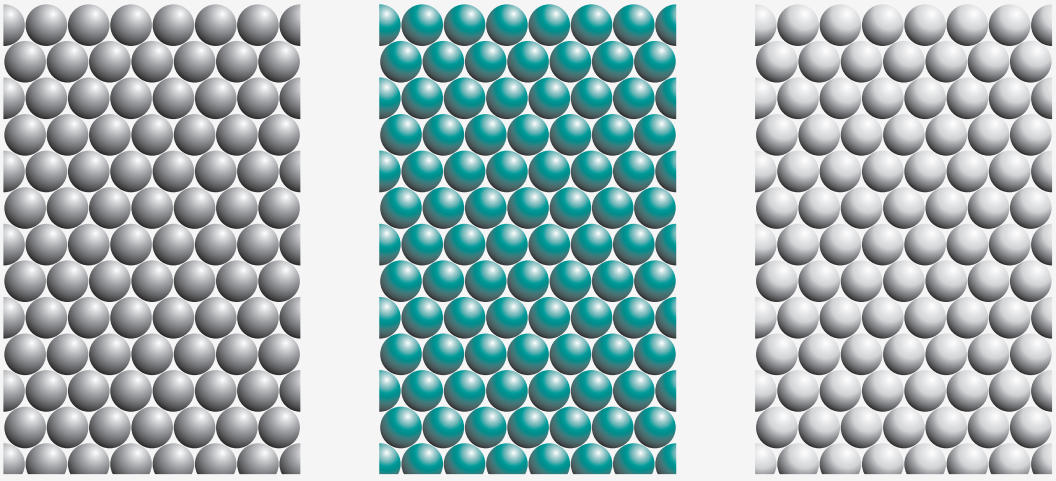
Chromatography resins come in many product forms and have a wide range of variants. This can make price comparison very difficult.

Which is cheaper: A resin sold in dry form for $6000/kg or a resin sold in slurry form for $3500/L? ***Answer*** --- it depends!

What about a simpler case of comparing a dry silica resin at $2500/kg to a dry polymeric resin at $6000/kg? Surely the silica resin is cheaper? It's not that simple! The purchase is by weight, but the column is filled by volume.

Check out the simple calculation sheet below to compare prices for filling a column and see how quoted prices can be misleading.

Grade	Polymer Ion Exchange Slurry	Dry Reverse Phase Polymeric	Dry Reverse Phase Silica
Quoted Price*	$3500/L of resin	$6000/kg of resin	$2700/kg of resin
Product delivery form	Resin slurry, 50% resin by volume	100% resin solids by mass	100% resin solids by mass
Factor to convert from mass to volume	Not Applicable	0.24 kg/L (hydration ratio)	0.55 kg/L (packing density)
Formula to calculate cost to fill a column	Column Volume **x** quoted price in $/L	Column Volume **x** hydration ratio in kg/L **x** quoted price in $/kg	Column Volume **x** resin density in kg/L **x** quoted price in $/kg
Cost to Fill 100 L Column	$350,000	$144,000	$148,500



* Hypothetical pricing for illustration purposes

Have a question? Contact us at: dupont.com/water/contact-us

DuPont Water Solutions

Life Science and Specialties

From complicated separations for drug development and crop-to-table processing solutions to enabling protein-rich diets and innovative healthcare solutions, our broad range of Life Science products helps improve the quality of life for humans, plants, and animals in our world.

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