Product Data Sheet

DuPont™ AmberLite™ 14i Inert Resin

Polypropylene, Inert Resin for Industrial Demineralization Applications

Description

DuPont™ AmberLite™ 14i Inert Resin is a floating, non-functionalized, transparent, cylindrical-shaped resin specifically designed for use as an upper layer in down-flow regenerated ion exchange systems, such as floating beds. This inert resin has a specific gravity lower than water, which ensures it will stay above the ion exchange resin bed. The inert forms a protective layer to prevent plugging of the distribution nozzles during the compaction/bed-lift step in case fines are present in the resin bed.

Use of AmberLite™ 14i is optional in AMBERPACK™ Ion Exchange Systems with AmberLite™ HPR packed bed resins installed.

Applications

- Demineralization

System Designs

- Packed beds
  - for AMBERPACK™ Systems or other down-flow regenerated packed bed systems
- Counter-current / Air hold-down

Historical Reference

AmberLite™ 14i Inert Resin has previously been sold as AmberLite™ RF14 Inert Resin.

Typical Properties

Physical Properties	
Polymer	Polypropylene
Type	Inert
Functional Group	None
Physical Form	Colorless, translucent, cylinders
Particle Size	
Particle Diameter	1.2 – 1.5 mm
Particle Length	1.3 – 1.7 mm
Density	
Particle Density	0.95 g/mL
Shipping Weight	500 – 580 g/L

Suggested Operating Conditions

Temperature Range	5 – 100°C (41 – 212°F)
pH Range	0 – 14

For additional information regarding recommended minimum bed depth, operating conditions, and regeneration conditions for separate beds (Form No. 45-D01131-en) in water treatment, please refer to our Tech Fact.

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Hydraulic Characteristics

Estimated pressure drop for DuPont™ AmberLite™ 14i Inert Resin as a function of service flowrate and temperature is shown in Figure 1a and a magnified scale of the same is shown in Figure 1b. These estimated pressure drop expectations are valid at the start of the service run with clean water and a well-classified bed.

Figure 1a: Pressure Drop
Temperature = 10 – 60°C (50 – 140°F)

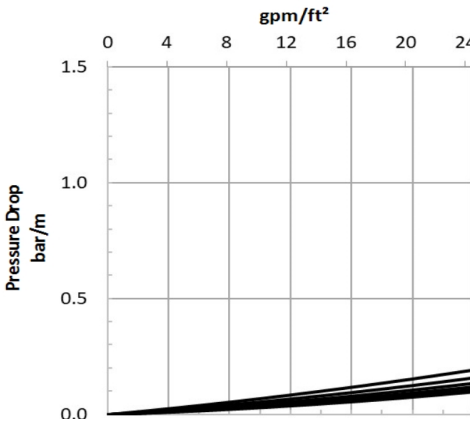
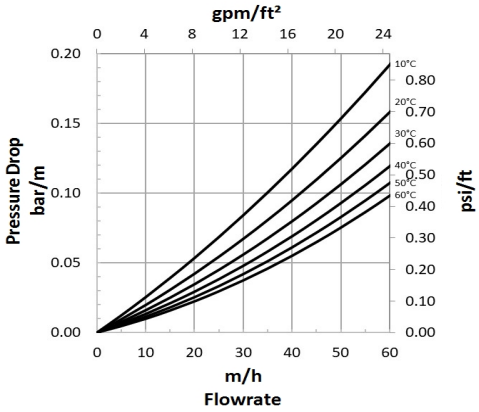


Figure 1b: Pressure Drop
Temperature = 10 – 60°C (50 – 140°F)



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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:

www.dupont.com/water/contact-us

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