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Historical Reference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)

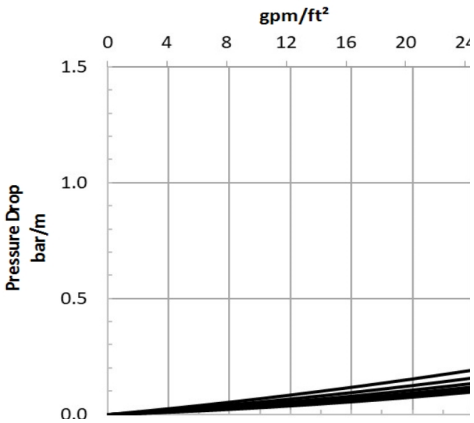
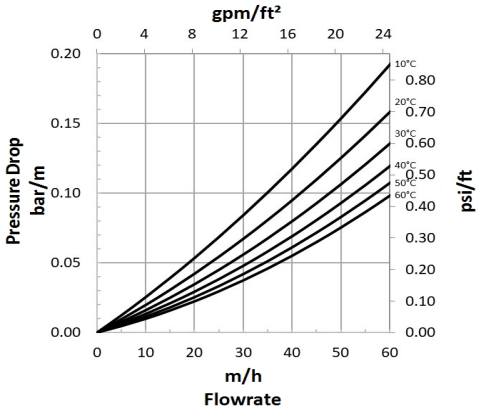


Figure 1b: Pressure Drop
Temperature = 10 – 60°C (50 – 140°F)



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.

Customer Notice

DuPont strongly encourages its customers to review both their manufacturing processes and their applications of DuPont products from the standpoint of human health and environmental quality to ensure that DuPont products are not used in ways for which they are not intended or tested. DuPont personnel are available to answer your questions and to provide reasonable technical support. DuPont product literature, including safety data sheets, should be consulted prior to use of DuPont products. Current safety data sheets are available from DuPont.

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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