

Product Data Sheet

DuPont™ AmberLite™ FPX68 Polymeric Adsorbent

Food-grade, Macroporous, Adsorbent Resin

Description

DuPont™ AmberLite™ FPX68 Polymeric Adsorbent is a macroporous, non-functionalized, adsorbent resin designed for food and biopharmaceutical processing where local regulations allow for such use.

In food processing, AmberLite™ FPX68 can be used for a wide variety of applications to purify and decolorize food-additive streams and to recover high- value materials, include proteins.

In biopharmaceutical processing, AmberLite™ FPX68 is an excellent choice for separation and purification of small molecular weight compounds such as antibiotics, vitamins, steroids, amino acids, enzymes, and peptides.

AmberLite™ FPX68 has high mechanical and thermal stability, making it an ideal choice for use in column or batch systems over a large number of process cycles.

Applications

- · Food processing
 - Decolorization
 - Purification
 - Recovery of high-value materials
- · Biopharmaceutical processing
 - Separation of small molecular weight compounds (antibiotics, vitamins, steroids, amino acids, enzymes, peptides, etc.)

Typical Properties

| Physical Properties | | |
|--------------------------|--------------------------------------|--|
| • | Consolinted and one of the materials | |
| Copolymer | Crosslinked aromatic polymer | |
| Matrix | Macroporous | |
| Туре | Adsorbent | |
| Functional Group | None | |
| Physical Form | White, opaque, spherical beads | |
| Nitrogen BET | | |
| Surface Area | ~450 m²/g | |
| Total Pore Volume | ~1.4 cc/g | |
| Chemical Properties | | |
| Ionic Form as Shipped | Not applicable | |
| Total Exchange Capacity | Not applicable | |
| Water Retention Capacity | 61 – 67% | |
| DVB Content | ≤ 50 ppb | |
| Particle Size § | | |
| Particle Diameter | 350 – 600 μm | |
| < 250 µm | ≤ 5.0% | |
| > 850 μm | ≤ 10.0% | |
| Density | | |
| Particle Density | 1.015 – 1.025 g/mL | |
| Shipping Weight | 690 g/L | |

[§] For additional particle size information, please refer to the Particle Size Distribution Cross Reference Chart (Form No. 45-D00954-en).

Suggested Operating Conditions

| Maximum Operating Temperature | 150°C (302°F) |
|-------------------------------|--|
| pH Range | 0 – 14 |
| Bed Depth, min. | |
| Capture | 750 mm (2.5 ft) |
| Chromatography | 1,500 mm (4.9 ft) |
| Flowrates | |
| Service | 2 – 16 BV*/h |
| Backwash | See |
| Regeneration | 1 – 4 BV*/h |
| Displacement | 1 – 4 BV*/h |
| Regenerant | Methanol or other water-miscible organic solvents (ethanol, isopropanol, acetone, etc.) Dilute bases and/or dilute acids Hot water or steam for volatile materials |

^{* 1} BV (Bed Volume) = 1 m³ solution per m³ resin or 7.5 gal per ft³ resin

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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.

Have a question? Contact us at:

www.dupont.com/water/contact-us

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