



Product Data Sheet

AMBERLITE™ FPX68 Polymeric Adsorbent

Food-grade, Macroporous, Adsorbent Resin

Description

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

Copolymer	Crosslinked aromatic polymer
Matrix	Macroporous
Type	Adsorbent
Functional Group	None
Physical Form	White, opaque, spherical beads

Nitrogen BET

Surface Area	~450 m ² /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. 177-01775).

Suggested Operating Conditions

Maximum Operating Temperature	150°C (302°F)
pH Range	0 – 14
Bed Depth, min.	
Capture	750 mm (2.5 ft)
Chromatography	1500 mm (4.9 ft)
Flowrates	
Loading	2 – 16 BV*/h
Backwash	See Figure 1
Regeneration	1 – 4 BV/h
Displacement	1 – 4 BV/h
Regenerants	<ul style="list-style-type: none">• 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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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:

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