

# F200 AWD-LF 12x40

Acid Washed Granular Activated Carbon

**Applications** 



F200 AWD LF 12x40 is used for purification of low pH solutions or for certain water purification applications. Since the carbon has been acid washed, the constituents of F200 AWD LF 12x40 will not be leached into the acidic solution. Its high mechanical strength and uniform transport pore distribution allows for successful multiple reactivation cycles and excellent performance of the reactivated carbon.

## Description

F200 AWD-LF is an acid washed granular activated carbon with a low acid soluble iron content that is designed for the purification of low pH solution or water applications. It can be used efficiently in fixed or moving beds. The particle size of 12x40 mesh has been selected to give a high rate of adsorption and low resistance to flow. F200 AWD-LF is produced with virtually no fines or dust. F200 AWD-LF is made from select grades of bituminous coal combined with suitable binders to give superior hardness and long life. Produced under rigidly controlled conditions by high temperature steam activation, this carbon provides high surface area, large pore volume, high density and a pore structure optimal for the removal of organic species and chlorine from a variety of solutions. This product complies with the requirements for activated carbon as defined by the Food Chemicals Codex (FCC) (8th Edition) published by the U.S. Pharmacopeia.

### Features / Benefits

- Reagglomerated metallurgical grade bituminous coal
- Low fines
- High mechanical strength and uniform transport pore distribution, resulting in excellent reactivation performance, and low attrition loss during handling and minimizing generation of fines in operations requiring backwashing
- A strongly adsorbing pore structure optimal for the adsorption of organics, color bodies and odor molecules
- Acid washed for high purity and to prevent ash leaching in acidic solutions

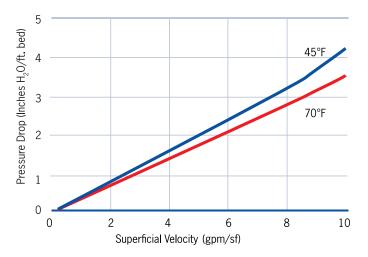
Specifications	F200 AWD-LF 12x40
lodine Number, mg/g	875 (min)
Mean Particle Diameter, mm	1.2–1.4
Moisture (As Packaged), wt%	3 (max)
Abrasion Number	78 (min)
Density (Apparent), g/cc	0.56–0.60
pH (Extractable)	5–8
Acid Soluble Iron, wt%	0.01 (max)
Acid Soluble Ash, wt%	0.5 (max)
10 US Mesh [2.00mm], wt%	5 (max)
< 40 US Mesh [0.425mm] (PAN), wt%	0.5 (max)

#### **Safety Message**

Wet activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed.

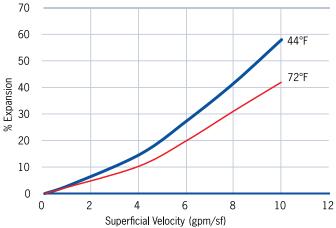
## **Typical Pressure Drop**

Downflow pressure drop through a bed of F200 AWD-LF 12x40



## **Typical Bed Expansion**

Bed Expansion During Backwash of F200 AWD-LF 12x40 with Water



# **Design Considerations**

The flowrate and contact time needed to achieve the desired contaminant removal, liquid viscosity, and temperature are considerations in designing an efficient and cost-effective activated carbon system. The pressure drop per ft. of bed depth for F200 AWD LF 12x40 carbon is shown for different liquid viscosities.

Safety Message