

PULSORB® HF250

Powder Activated Carbon with High Filterability

DESCRIPTION

PULSORB® HF250 is a high activity pulverised activated carbon, specifically designed for the purification of viscous liquids requiring high filterability, where good removal of impurities is required. It is produced from selected grades of bituminous coal by a process of high temperature steam activation. This carefully controlled process develops an exceptionally high internal surface area with a pore structure optimised for the adsorption of organic impurities, whilst retaining excellent filtration characteristics.

FEATURES

PULSORB® HF250 has several properties which explain its superior performance in a wide range of applications:

- Produced from a pulverised blend, the powder activated carbon is more uniform resulting in a **consistent high quality product**.
- Optimal mesh size that ensures a **rapid rate of adsorption**.
- Particle size distribution specifically designed for ease of handling in most feed systems.
- Particle size distribution ensures a consistently low filter cake resistance, allowing the use of higher filtration rates.
- **PULSORB® HF250** conforms to the latest edition of the US codex specifications, "Food Chemicals Codex".
- Produced in-house on dedicated equipment specifically designed for this product, ensuring consistent high quality material.

APPLICATION

PULSORB® HF250 is primarily utilised for the removal of polycyclic aromatic hydrocarbons (PAH), dioxins and polychlorinated biphenyls (PCB) from edible oils.

PULSORB® HF250 is also used for the decolourisation and purification of high viscosity liquids, particularly heat sensitive products.

Typical applications include:

- Sunflower oil purification
- Soybean oil purification
- Palm oil purification
- Rapeseed oil purification
- Olive pomace oil purification
- Fish oil purification

PROPERTIES

PULSORB® HF250	
SPECIFICATIONS	
Iodine Number, min., mg/g	800
Moisture, as Packed, max., wt%	10
Particle Size Analysis by laser analysis < 325 US Mesh (45µm), min., vol%	65-85

(Please refer to the Sales Specification Sheets, which state the Chemviron test method used to define the above specifications. Copies are available upon request.)

PULSORB® HF250	
TYPICAL PROPERTIES	
Loose packed density*, kg/m ³	320
Contact pH range	8-10
Surface Area, (N ₂ BET method**), m ² /g	900
Total Ash, wt%	11

() Loose packed density to determine amount that can be filled into silo by bulk tanker.*

*(**) Brunauer, Emmett and Teller, J.Am. Chem. Soc. 60. 309 (1938).*



DESIGN INFORMATION

The main design considerations for the use of powder activated carbon are the powder activated carbon type, the dose rate, contact time and dosing point in the process.

Apart from the type of activated carbon, the performance for a particular application will depend on the following factors:

- Type of compounds to be removed.
- Concentration of the compounds to be removed - The higher the concentration of the compound to be removed, the greater the dose rate or contact time required.
- The dose rate of carbon will have a significant effect on the performance of the carbon. Adsorption kinetics, and thus contact time, are an important factor in the performance of activated carbon; therefore the time allowed for adsorption is important. In practice, the contact time will depend on where the carbon is dosed and the other treatment processes used.

PACKAGING

- 18 kg bags
- Big bags
- Bulk tanker

SAFETY MESSAGE

Wet activated carbon preferentially removes oxygen from air. In closed or partially closed containers and vessels, oxygen depletion may reach hazardous levels. If workers are to enter a vessel containing carbon, appropriate sampling and work procedures for potentially low-oxygen spaces should be followed.

QUALITY

Each of our worldwide operations has achieved **ISO 9001:2015** certification for their quality management system related to activated carbon. **Chemviron** guarantees the specifications against representative sampling.

CHEMVRON

Chemviron, the European operation of Calgon Carbon Corporation, is a global manufacturer, supplier, and developer of activated carbons, innovative treatment systems, value added technologies and services for optimising production processes and safely purifying the environment.

With our experience developed since the early years of the twentieth century, facilities around the world and a world-class team of over 1,300 employees, Calgon Carbon Corporation can provide the solutions to your most difficult purification challenges.

***N.B.** Chemviron reserves the right to change specifications without notice. All rights reserved for reproduction in part or in full without prior permission from Chemviron.*

P-19660/03-2019