

ENVIROCARB™ 207C 4X8 AND 6X12 Coconut Based Granular Activated Carbons

DESCRIPTION

ENVIROCARB™ 207C are high activity coconut based granular activated carbons for use in general air treatment applications. They are manufactured from specific grades of coconut shell to produce a high quality carbon that can meet the demands of general air treatment.

ENVIROCARB™ 207C are proven products used by many customers, especially industrial and domestic air filter manufacturers and companies involved in the service and maintenance of air filtration systems.

FEATURES

The **ENVIROCARB™ 207C** range has several properties which explain its performance in a wide range of applications.

- Manufactured from specific grades of coconut shell to produce a **Selected Pore Structure** for maximum adsorption.
- Excellent filling characteristics.
- Coconut based granular activated carbons are suitable for **multiple reactivations** compared to other base materials such as peat and wood.
- Efficient adsorption rates with excellent retentivity.
- Selected particle size ranges for pressure drop optimization.

SELECTION

ENVIROCARB™ 207C 4x8 should be selected as standard. **ENVIROCARB™ 207C 6x12** should be selected where extra low emission concentrations are required or in small devices such as cartridge filters where the higher pressure drop can be accommodated.

ENVIROCARB™ 207C is used in a range of different applications including:

- Treatment of cooking odours.
- Industrial air filtration.
- Removal of Exhaust fumes from Airport Air Conditioning Systems.
- Odour Control in public and office buildings.
- Smoking rooms.

PROPERTIES

SPECIFICATIONS	207C 4x8	207C 6x12
Carbon Tetrachloride activity, min., %w/w	50	50
Moisture Content, as packed, max.	10	10
Mesh Size, US sieve Series		
>6 mesh, max %		8
<12 mesh, max%		5
>4 mesh, max %	8	
<8 mesh, max%	5	

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

TYPICAL PROPERTIES	207C 4x8	207C 6x12
Bed Density*, kg/m ³	510	510
Hardness number, %	97	97
Total Surface Area, (N ₂ BET method**), m ² /g	1100	1100
Iodine No	1100	1100
Mean Particle Diameter, mm	3.5	2.4

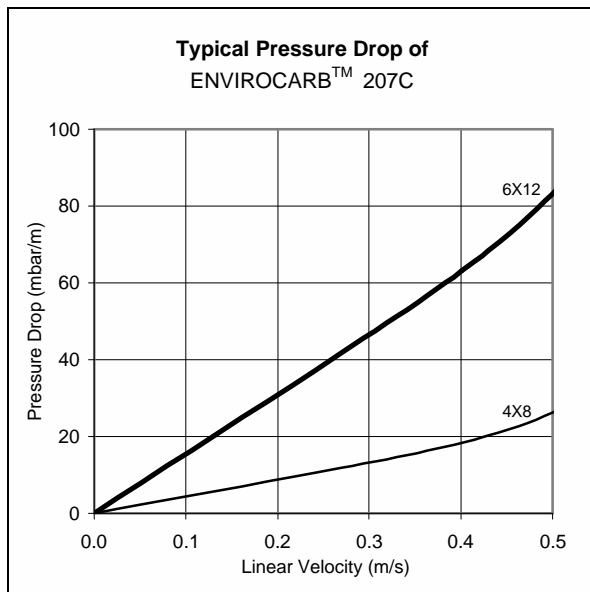
(*) Bed Density is used for adsorber sizing

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

RECYCLING BY THERMAL REACTIVATION

Once granular activated carbon is saturated or the treatment objective is reached, it can be recycled, by thermal reactivation, for reuse. Reactivation involves treating the spent carbon in a high temperature reactivation furnace to over 800°C. During this treatment process, the undesirable organics on the carbon are thermally destroyed. Recycling by thermal reactivation is a highly skilled process to ensure that spent carbon is returned to a reusable quality. **Chemviron Carbon** operates Europe's largest reactivation facilities and daily recycles large quantities of spent carbon for a diverse range of customers. Recycling activated carbon by thermal reactivation meets the environmental need to minimise waste, reducing CO₂ emissions and limiting the use of the world's resources.

Chemviron Carbon can offer a recycling service for the **ENVIROCARB™** range to avoid disposal of the spent activated carbon.



DESIGN INFORMATION

The design of an activated carbon treatment system will depend on the nature of the stream to be treated. The following are typical design parameters for organics removal with the **ENVIROCARB™** range from air:

- Superficial contact time 0.3-3 s.
- Bed depth 0.05-2 m
- Linear velocity up to 0.4 m/s

PACKAGING

- 25 kg bags
- Big Bags

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 **ISO9001** certification for their quality management system related to activated carbon. **Chemviron Carbon** guarantees the specifications against representative sampling.

CHEMVRON CARBON

Chemviron Carbon, the European operation of Calgon Carbon Corporation, is a global manufacturer, supplier, and developer of granular activated carbon, 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 1,200 employees, Calgon Carbon Corporation can provide the solutions to your most difficult purification challenges.

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Visit our website at www.chemvironcarbon.com

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