



ACPL 6X12 207C

HYDROGEN PURIFICATION ACTIVATED CARBON

Hydrogen Purification

The removal of carbon dioxide from hydrogen in large scale commercial hydrogen plants is made using pressure swing adsorption (PSA). In such way methane, carbon monoxide, nitrogen, moisture and argon can be also removed from hydrogen.

Typical hydrogen purities higher as 99.99 vol.-% can be obtained by use of a PSA system. ACPL manufactures activated carbon ACPL 6X12 207C, which is high quality adsorbent for the purification of hydrogen by use of PSA pressure swing adsorption systems.

ACPL 6x12 207C is a hundred percent natural product manufactured by steam activation process. It is manufactured for Air and Gas purification applications.

ACPL 6X12 207C is used for the following applications:

- Removal of carbon dioxide, methane, ethane and ethylene from hydrogen by pressure swing adsorption.
- Removal of industrial odors.
- Removal of volatile organic compounds.
- Air conditioning and ventilation systems.



Various Vapour Removal

The adsorption capacity of activated carbon for the various vapours varies with:

- Concentration,
- Humidity and temperature,
- Actual velocity used through the filters,
- contact time,
- Particle size of the activated carbon,
- Diffusion coefficient of the constituent(s) to be adsorbed,
- Distribution of the pore sizes of the activated carbon.

Impregnation of activated carbon is used to increase the capacity for some gases, such as mercury, hydrogen sulphide, acid gases, ammonia, etc. Combination of impregnated and non-impregnated carbons can solve cases in which various components have to be removed.

Technical Data of ACPL 6X12 207C

Parameter	Value	Test Method
Moisture	4% Max.	ASTM D2867
Apparent Density	0.490 (gm/cc) Min	ASTM D2854
CTC Activity	55% - 60 %	ASTM D3467
Surface Area	1050m ² /g Min.	BET – N ₂
PSD +6	2%	ASTM D2862
PSD -12	2%	ASTM D2862
Ash	3% Max.	ASTM D2866
Ball Pan Hardness	99 Min.	ASTM D3802

Active Char Products Pvt. Ltd. Granular and Extruded Carbon Grades

AC Carb range has Granular and Extruded Carbons, Impregnated for specific application in catering to respective gas phase application criteria.

Please contact us for specific product selection.

Packaging

- 55lb./110lb. (25/50 kg) poly bag
- 1,100 lb.(500/550 kg) Bulk bag



For more information on the product, please contact our application specialists at the address below

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