



ACPL is committed to protect our environment by adopting eco-friendly production procedures right from charcoal to Activated Carbon.

Our *'Green Carb'* line of Activated Carbons ensures zero carbon foot print. Active Char Products Pvt.Ltd (ACPL) is one of the largest manufacturers of steam activated carbon in the world; have over 18 years of experience in carbon Industry with unmatched technical acumen and product expertise. ACPL is promoted by the prestigious M far group.

ACPL absorbs the full advantages of sophisticated technology and abundant coconut production in the region to generate world class Activated Carbon out of coconut shells, leveraging its strategic location in Kerala(Sanskrit: Keralam-land of coconut) on the southern tip of India.

AN ISO 9001 - 2008 COMPANY

Active Char Products Pyt Ltd Carbon services for a purer tomorrow

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# Granular Activated Carbon

Granular Activated Carbon is manufactured from the best hardest and purest quality Coconut Shell Charcoal. The quality of coconut shell charcoal is of prime importance and therefore, special care is to be taken in the selection of it. Coconut shell charcoal is the hardest charcoal available to manufacture Granular Activated Carbon of very high hardness/Abrasion Number to result minimum attrition losses during columns operation.



### Advantages of coconut shell charcoal based Activated Carbon



Active Char manufactures **Granular Activated Carbon by Steam Activation Process** in a controlled manner. Super-heated high pressure steam and air injected over carbon bed in a rotary kiln at about 800-

 $1000^{\circ}$ C temperature. This activation process opens the microspores and thereby increasing its surface area. A surface area increases the capacity of adsorption of the carbon molecule.

The activated material as coming out from the kiln is washed with Deionized Water, Acid Washed to remove inorganics, disintegrated and screened to the desired mesh size.

### Applications

There are numerous applications of Granular Activated Carbons. We list out a few below.

- 1. Dechlorination of process water.
- 2. To remove Oil & Grease from condensate.
- 2. To remove oil vapor from the gas stream in fertilizer plants.
- 3. De-oiling of compressed gases.
- 4. In Gas scrubbers for purification of Amine solution
- 5. Removal of mercury from coal fired utilities.
- 6. Adsorption of radioactive gas.
- 7. Solvent recovery Systems
- 9. Removal of dissolved organics.
- 10. As a deodorizer.





- 11. Purification of drinking water and air.
- 12. Purification of distilled Alcohol (ENA)
- 13. Purification of Vodka to its highest standards
- 14. In Gold recovery for Cyanide leaching process
- 15. In ELCD Automotive Canisters
- 16. Purification of Organic and Inorganic Chemicals
- 17. Purification of Fumaric Acid
- 18. In Vapour Recovery Systems for Petroleum Storage Terminals
- 19. Refined Sugar Purification by Pulse Bed Operation
- 20. Purification of Carbon dioxide



### Selection Criteria for Activated Carbon

- ✓ High Apparent Density During de-chlorination, each hypochlorous acid molecules removes one carbon atom from the carbon structure and thus weakens the carbon granules. High density carbons have more carbon atoms per particle and thus maintain structural integrity after de-chlorination.
- ✓ Greater Hardness/Abrasion Resistance Carbons having high abrasion resistance produce fewer fines during back washing and reactivation and thus reduce carbon loss.
- ✓ Greater Total Adsorption Pore Volume Better adsorption capacity in high-concentration streams is ensured by carbon with higher total adsorption pore volume.
- ✓ Stronger Average Adsorption Force Stronger adsorption force is required for the better trace removal capacity.
- ✓ Faster Adsorption Rate In order to allow mass transfer of the adsorbate to the adsorption pore, carbon with better pore structure has to be used. It reduces necessary contact times and thus enables the use of smaller beds.

# Advantage ACPL

#### **Quality Testing**

At ACPL, we believe in strengthening customer relation on the basis of quality. At every moment our team of highly efficient researchers continues to stretch their capabilities to meet different stringent quality benchmarks for our products.

We provide testing facility of our products. NSF, EU, JIS, AWWA, AARL, IS, ASTM, etc. are few of the standards we follow.

#### Customization

At ACPL, we believe in catering every single needs of the customer. Hence, we customize. We customize our product as per the specification of the customer. We are capable in producing ultra-fine sizes and different meshes



# Technical Information of Activated Carbon

NAME OF THE PRODUCT – ACTIVATED CARBON GRANULAR									
GRADE	AC Carb 400	AC Carb 500	AC Carb 600	AC Carb 700	AC Carb 800	AC Carb 900	AC Carb 1000	AC ( 1100	
DESCRIPTION	Black dense granular								
SOURCE OF MATERIAL	Coconut shell charcoal base								
IODINE ADSORPTION mg/gm (+ 25)	400	500	600	700	800	900	1000	)	1100
Iron	<0.02 %	<0.02 %	<0.02 %	<0.02 %	<0.02 %	<0.02 %	<0.02 % <0.0		<0.02 %
TOTAL SURFACE	400	500	600	700	800	900	1000	)	1100
HARDNESS NO.	98-99	98-99	98-99	98-99	98-99	98-99	98-99		98-99
BULK DENSITY gm/cc	0.500g/cc	0.500g/cc	0.500g/cc	0.500g/cc	0.500g/cc	0.500g/c	c 0.500g/	′cc	0.500g/cc
pH OF 1% WATER EXTRACT	6-8	6-8	6-8	6-8	6-8	6-8	6-8		6-8
% ASH CONTENT	1-3	1-3	1-3	1-3	1-3	1-3	1-3		1-3
% SILICA CONTENT (MAX)	3	3	3	3	3	3	3		3
% MOISTURE CONTENT (MAX)	3	3	3	3	3	3	3		3
Calcium (Acid extr)	<0.08%	<0.08%	<0.08%	<0.08%	<0.08%	<0.08%	o <0.08	%	<0.08%
Chloride	<0.02% mass Common for all grades								
Particle Size 5% Tolerance on Each side	Custom sizes are available on request, Common sizes are 8x30,8x40,12x40 in USS Mesh								

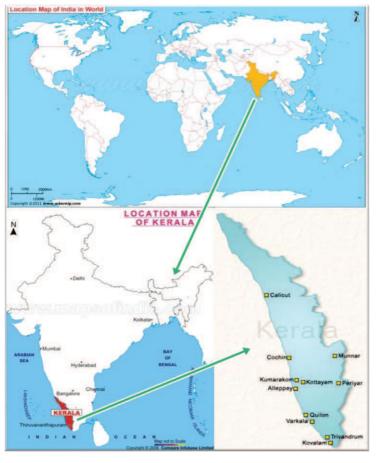




# Packaging

Our packages are designed to maintain the product quality and prevent degradation under normal storage and handling conditions. Special packing as per customer requirement is also available on request.

The material is packaged in **500kgs** net in poly woven bags or **25kgs** net in PP bags with inner lining will be shrink wrapped and palletized into fumigated Pallets as per ISPM 15 standard



### Our Location

For Sales/Product Inquiries,

# Contact Us

Call +91 484 6586362 +91 484 2556518 Fax +91 484 2556516 Or E-mail

<u>marketing@activechar.com</u> Please remember to mention your contact details, so that we can serve you better.





A 100% Export Oriented Unit



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Active Char Products Pvt. Ltd is strategically located in Kerala, on the southern tip of India, acclaimed as a place of coconut trees; Kerala even derives its name from the Sanskrit name 'Keralam' means 'land of coconut trees'. Active Char Products Pvt.Ltd absorbs the full advantages of sophisticated technology and abundant coconut production in the region to generate world class Activated Carbon out of coconut shells.

