



Active Char Products Pvt. Ltd. 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.



AN ISO 9001 – 2008 COMPANY

Water is the symbol of life and sustainability of life depends on its purity

AC Carb Ltd. in U.K. represents Active Char Products Pvt. Ltd., who are one of the largest coconut shell charcoal based steam Activated Carbon manufacturers in the world. They are strategically located in Kerala, on the southern tip of India, famous as a place of coconut trees (Kerala even derives its name from the Sanskrit name 'Keralam' meaning '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.



*Carbon services for a purer tomorrow*

## Industrial Waste Water Treatment

Most industries in the world produce waste water that may contaminate the sources of water if it is released without treatment. In industrial waste water treatment process the contaminated water is treated with activated carbon. The high porosity and surface area makes the activated carbon the best known adsorbent in the world. Coconut shell based activated carbon has the special hardness and high surface area suitable for applications such as Process Effluent, Washing Effluent, Ground water Remediation, Mercury Removal etc. Non biodegradable toxic substances or pollutants are adsorbed well by Activated Carbon.

### Application range of AC:

- Process Effluent
- Washing Effluent
- Swimming Pools & Aquariums
- Mercury Removal
- Boiler Condensate
- Groundwater Remediation
- Pesticides Removal



## Drinking Water Treatment

Activated carbon is used to reduce chlorine and certain organic compounds presents in the water. It can also remove dissolved radon, lead and taste and odor from drinking water. Removal of organics from chlorinated potable water is essential to prevent formation of trihalomethanes (THMs) – a class of carcinogens. Activated Carbon is used in point-of-entry (POE) and point-of-use (POU) filters to remove taste, odor and color in drinking water.



### Application range of AC:

- Municipal Water Treatment Plants
- Desalination System
- POE and POU filters



## H<sub>2</sub>S Gas Removal

Hydrogen sulphide is an offensive gas emitted from many industrial processes where biological activity is present including waste water treatment plants.

H<sub>2</sub>S and Mercaptans can be removed from the gas mainly by two types of activated carbon namely,

- Impregnated Activated Carbon
- Virgin Activated Carbon

Activated Carbon impregnated with special chemicals has showed better performance in removing H<sub>2</sub>S from industrial waste water.

## Ultra Pure Water Industry

During the production of microchips, the quality of the process water plays a vital role. Active Char Products Pvt. Ltd.'s Activated Carbon can be used in the manufacturing of Ultra Pure Water in the semi conductor industry.

Application range of AC:

- Ultra Pure Water for Electronics Industry



## Advantages of coconut shell charcoal based Activated Carbon



Active Char Products Pvt. Ltd. produce high grade coconut shell based activated carbon. The coconut charcoal is first activated by subjecting it to steam and high temperature (2300° F) without oxygen. In the activation process the porosity of the carbon is increased therefore it acquires higher surface area. It is then crushed and grinded into granular and powder sizes suitable for different treatment uses. In some cases the activated carbon is acid washed or impregnated with special compounds to enhance the removal of specific contaminants.



### 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.

**Granular Activated Carbon** is used to remove odor and taste in the water including compounds, overall organics, pesticides, detergents, suspended solids, chlorine etc.

**Powder Activated Carbon** is used widely for removal of taste and odor, organic micro pollutants etc. It generally used in batch process where the amount can be easily altered and the powder can be easily removed.

### Technical Information of Activated Carbon

| Parameters        | Typical Values               |
|-------------------|------------------------------|
| CTC Adsorption    | 40 - 120 %                   |
| Iodine No.        | 800 - 1700 mg/g              |
| Surface Area      | 850 - 1750 m <sup>2</sup> /g |
| Ball pan hardness | 97 - 99.8                    |
| Apparent Density  | 420 - 550 g/ltr              |
| Moisture Content  | <5%                          |
| Ash Content       | <5%                          |
| pH                | 9 - 11                       |
| pH Acid Washed    | 6 - 8                        |

- *Samples of all grades are available*
- *All supporting documents like MSDS, Technical data sheet, Certificate of analysis will be provided on request*
- *Sizes available: 4 mesh – 325 mesh(Standard USS mesh)*
- *Common sizes offered are 4x8, 6x12, 12x40, 18x40, 20x50, 30x60, 60x140, 80 x325*

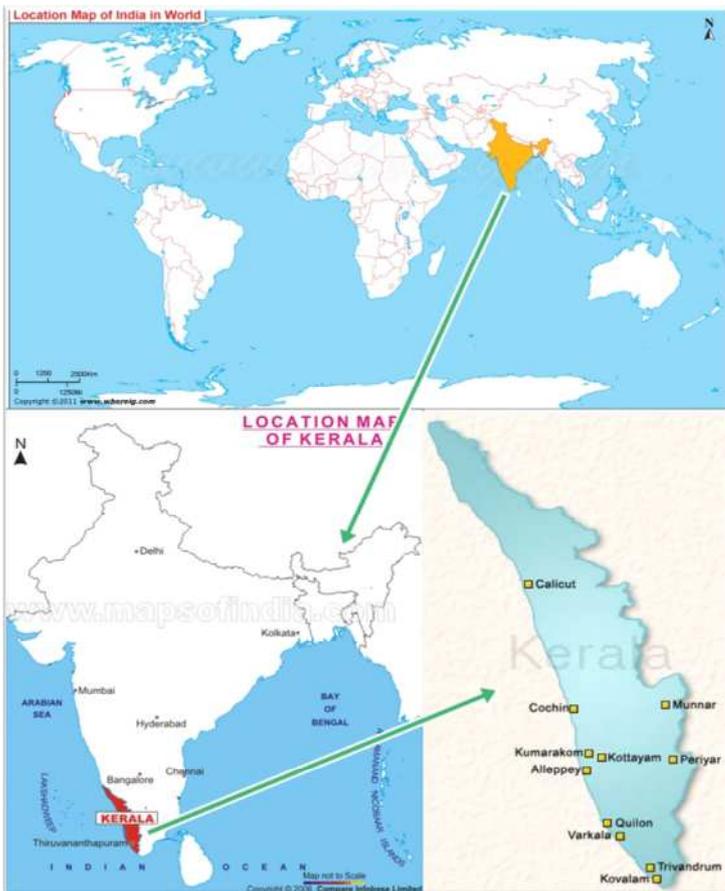
## Packaging



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

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Or E-mail

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Please remember to mention your contact details, so that we can serve you better.



A 100% Export Oriented Unit



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