

Highlights:

Boyce Carbon holds the exclusive rights of being the sole source of high quality virgin coconut shell based activated carbon, charcoal, powders, etc. made in the form of pellets, granular, & powder forms.

Features and Benefits :

Microporous pore composition for superior quality removal of trace concentrations of organics

Low ash content

pH neutral

ANSI/NSF Standard 61 sorted out for potable water applications

Conforms to ANSI/AWWA B604-05

POWDERED ACTIVATED CARBON (PAC)

Powdered Activated Carbon is used to remove range of organic contamination from waste and process waters.

Fabricated by employing the usage of procedures like direct activation, pure powdered activated carbons developed by Boyce Carbon have proven to offer superior performance in an extensive array of liquid phase treatment applications.

Applications include:

Dechlorination/chloramine reduction

Removal of organic contaminants

Taste and odor reduction

Disinfection-by-product (DBP) removal

Pesticide removal

Drinking water treatment

Groundwater remediation

Wastewater treatment

Pure powdered activated carbons are extensively checked for quality by employing various quality testing procedures.

Features and Benefits:

ANSI/NSF Standard 61 classified for usage in potable water applications

Totally conforms to physical, performance and leachability requirements put forward by the current ANSI/AWWA B600-05 (which comprises of the Food Chemical Codex requirements) Highly refined quality assurance program ensures consistent quality from lot to lot on their way to shipments.

OTHER COCONUT PRODUCTS

Coconut Shell Powder

Coconut Shell Charcoal Granules

Coconut Shell Charcoal

Coconut Shell Briquette Charcoal

Desiccated Coconut Powder

Coconut Husk Chips

SOLUTIONS

Application and Solutions

Boyce Carbon works with world leaders to bring in world class systems and solutions for Industrial water and wastewater treatment solutions.

Applications:

Boyce Carbon helps customers to treat water and waste water, following are the applications Boyce specializes in

Aquatic Water Treatment

Drinking Water Treatment

Groundwater Treatment

High Purity Water

Industrial Process Water

Odor and Vapor Control

Sludge & Biosolids Treatment

Wastewater Treatment

Water Recycle and Reuse

Water separate while processing oil & gas

AN ESTABLISHED SOURCING NETWORK IN ASIA



Boyce™

Innovation for sustainability

Boyce Carbon

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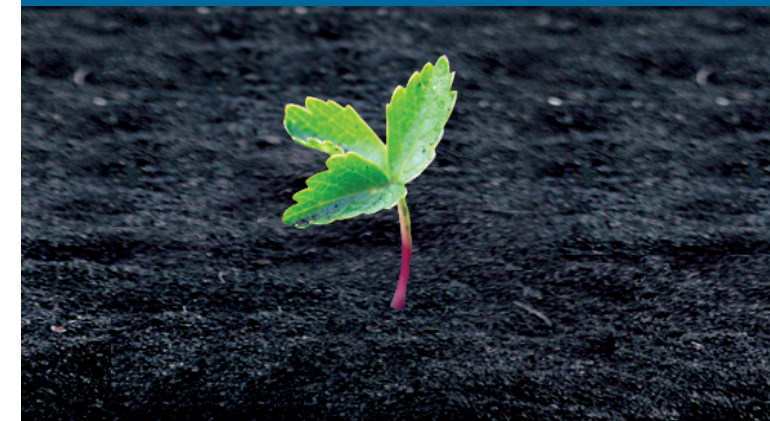
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Boyce™

Innovation for sustainability

THE GREENER SIDE OF CARBON





Innovation for sustainability, Innovation is the act or process of inventing or introducing something new, and it is more than just research. It is the need to be complemented by other elements in order to really become an innovation. Innovation or the 'turning of good ideas into competitive solutions for society' is an investment which only competitive industries are able to accommodate.

Sustainability, is the ability to be maintained, and needs to be kept alive without being overlooked. The triangle of sustainability acts on three pillars; economic, social and environmental. At Boyce Carbon we constantly fund research projects that lead to innovation; innovation to increase the life of our resources like water and air.

Innovation for sustainability works hand in hand, like the sun and water for the growth of nature. At Boyce, we constantly seek to explore the green side of carbon, to innovate for sustainability.

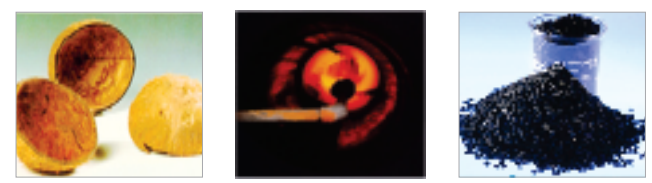


Boyce Carbon is a company into sustainability based solutions and products. We work towards identifying and procuring carbon based products that are used across industry like food processing, pharmaceutical, water management and treatment, chemical and other industry applications.

We source from the optimal sources with a technical orientation on the product. The sourcing is done from the best sources networked across Asia, India, Srilanka, Philippines, Indonesia and Malaysia. Our comprehensive product range includes activated carbon and coconut shell based products.

A complete range of premium virgin activated carbons made from high quality coconut shell charcoal, and Coconut Shell Charcoal in granular and powder forms are available in the form of Coconut Shell Cakes, Desiccated Coconut, Coconut shell charcoal Briquettes, Coconut Shell Charcoal Granules, Coconut Shell Charcoal Lumps, Coconut Shell Charcoal Powder, Coconut shell powder, Coconut shell chips, etc.

The company has been certified for ASNI/NSF, Standard 61 and ISO 9001 and satisfies the requirements of the Food Chemical Codex.



COCONUT SHELL IS MORE EFFICIENT

Activated carbons produced from coconut shells typically have a tighter, more micro porous pore structure than their coal-based counterparts. This is due to the inherent pore structure of the raw material coconut shell as compared to raw material coals. This micro porosity lends itself towards certain applications where activated carbon is used. Also, coconut shell-based carbons tend to be harder, more resistant to abrasion, and lower in ash than similar grades of coal-based carbons. A quick comparison of standard specification measures on coconut shell carbons versus coal carbons is as follows:

Coconut Producing Countries in South East Asia And their Annual Volume

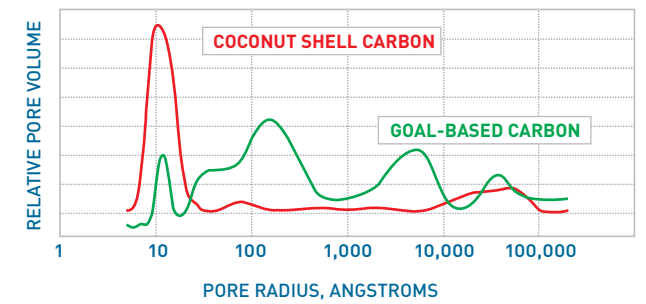
Country	2007
Asia and Pacific	47934625
India	23968000
Indonesia	23595000
Malaysia	822000
Philippines	14835000
Sri Lanka	3546000
Thailand	2130000
Vietnam	2065000

STRENGTH OF INDIAN COCONUT INDUSTRY

- ◆ One of the leading producers of coconuts in the world producing 13 billion nuts per annum.
- ◆ Coconut area distributed in 18 states and three Union Territories under different agro-climatic conditions.
- ◆ 3000 years' tradition in coconut cultivation.
- ◆ Premier coir manufacturing country in the world.
- ◆ Producer of best grade milling copra in the world yielding high grade coconut oil known for its aroma and flavour.
- ◆ Large number of farmer's co-operative societies in primary processing and marketing.
- ◆ Government agencies such as Kerafed, State Trading Corporation, Kerala State Marketing Federation and Karnataka State Marketing Federation in manufacturing and marketing of branded coconut oil in small packs.
- ◆ Hundreds of reputed and established private firms in manufacturing and marketing of various coconut products including branded coconut oil in small packs.
- ◆ Wide range of coconut products both edible and non-edible available for export.
- ◆ Technical know-how and trained manpower for the manufacture of various coconut based products.
- ◆ Availability of research support by reputed research organizations such as CSIR, ICAR and DRDO.
- ◆ Good number of cultivators / varieties having specific nut characteristics.

Comparison of Typical properties: Coconut Shell Versus Coal-Based Carbons

Parameter	Aqueous Phase		Vapor Phase	
	Coal-Based	Coconut-Based	Coal-Based	Coconut-Based
Iodine No., mg/g	900-1000	1100-1200	-	-
Butane Activity	-	-	22-25	23-28
Carbon Tetrachloride Number	-	-	55-64	60-71
Abrasion Number	75-80	80-85	-	-
Hardness Number	-	-	90-95	95-98
Ash, Wt. %	10-15	4-6	12-15	4-6
Apparent Density, g/cc lb/ft ³	0.46-0.63 29 - 39	0.45-0.52 28 - 32.5	0.47-0.53 29 - 55	0.45-0.52 28 -32.5



GRANULAR ACTIVATED CARBON (GAC)

Coconut Shell-Based Granular Activated Carbon

Boyce Carbon holds on to its credit of being the exclusive provider of high quality coconut shell based activated carbons. It is this high activity coconut shell based granular activated carbon that serves as the ideal element in the process of Water purification. We can also supply acid washed granular carbon for micro level processing.

Boyce Carbon in India is based in Coimbatore. The location of Boyce Carbon in Coimbatore holds its own strategic importance in the production of coconut shell based products owing to its proximity to the high coconut clusters area in Tamilnadu, Karnataka, and Kerala. Boyce coconut shell based products like activated carbon are fabricated from choicest of the supplies of coconut shell. The produce brought forth by us is a hard, 12 x 30 mesh size, attrition resistant high surface area carbon that is capable of removing the unmanageably adsorptive organics.

This acid-washed carbon is works in an effective way by absorbing chlorine, disinfection by-products, TCE, PCE, MTBE and other trace level organics.

All the products at Boyce carbon go through QA/QC testing at our state-certified environmental and carbon testing laboratory in India. Our effectual quality control tests employ the usage of ASTM standard testing methods to ensure the accordant quality of Boyce Carbon Products.

