

# Photocatalytic Activated Carbon

(Trade Name: Cri-Up®)

Code: KDX

## About the product

KDX (Trade Name: Cri-Up®) is a multifunctional activated carbon that combines high-quality coconut shell activated carbon, known for its excellent adsorption capacity, with a titanium dioxide photocatalyst that generates reactive oxygen species under light exposure. By utilizing both the physical adsorption of activated carbon and the decomposition action of titanium dioxide, it provides environmental functionalities such as antibacterial, antifungal, and water purification effects.

### FEATURES

#### Hybrid Effect of Adsorption and Decomposition

The activated carbon adsorbs fine particles and microorganisms, while the titanium dioxide generates reactive oxygen species (such as hydroxyl radicals) under light exposure. These radicals chemically decompose and detoxify the adsorbed pollutants.

#### Antibacterial and Antifungal Properties

The photocatalytic action suppresses the growth of bacteria and mold, making it suitable for long-term use in outdoor or high-humidity environments.

#### Environmentally Friendly and Highly Safe Design

Titanium dioxide is highly stable and does not leach additives, making it safe for use in water-contact applications.

### PRODUCT PROPERTIES

1	Shape	—	Granular
2	Material	—	Coconut shell
3	Activation method	—	Steam Activation
4	Catalyst	—	Titanium oxide
5	Iodine number	mg/g	900 <
6	Moisture content	%	15 >
7	Total ash content	%	5 >
8	Surface area	m <sup>2</sup> /g	ca.1,000
9	Pore volume	cm <sup>3</sup> /g	ca.0.04
10	Apparent density	g/cc	ca. 0.59
11	pH	—	7-9
12	Particle size	—	US 4×8 mesh

### APPLICATION

#### Applications in Water Purification

In water-contact environments exposed to sunlight (e.g., ponds, fountains, water channels), it helps suppress the growth of algae (such as blue-green algae) and microorganisms.

### HEALTH AND SAFETY

Review all relevant health and safety information before using this product. For complete health and safety information, refer to the Safety Data Sheets.

**PACKING** 20kg paper bag