

INDOCARB® RespiraX

PRODUCT BULLETIN

Advanced Impregnated Activated Carbon for Multi-Gas Respirator & Personal Protection Applications

IndoCarb® RespiraX is a premium coconut shell activated carbon engineered for advanced respiratory protection and gas-phase air purification applications. The media is specially developed to remove a broad spectrum of hazardous gases and vapors encountered in industrial, laboratory, emergency response, and chemical processing environments. By combining the exceptional adsorption characteristics of high-quality coconut shell steam activated carbon with proprietary surface treatment technology, RespiraX delivers reliable performance against organic vapors, inorganic gases, acid gases, ammonia, and amines while maintaining excellent mechanical strength, low dust generation, and consistent filtration efficiency. RespiraX is suitable for use in multi-gas respirator cartridges, escape respirators, collective protection systems, and industrial air purification equipment where dependable protection against multiple gaseous contaminants is required.

The highly developed microporous structure provides exceptional surface area for adsorption, while the impregnated active compounds selectively react with alkaline gases, converting them into stable compounds retained within the media structure. This dual-action mechanism improves media utilization, enhances contaminant retention, and provides reliable long-term performance compared with conventional activated carbon products,

Applications

- Air-purifying respirator cartridges
- Industrial respirators
- Gas masks
- Escape hoods
- Emergency breathing devices
- Military and defense respiratory systems
- CBRN protection systems
- Chemical processing facilities
- Pharmaceutical manufacturing
- Oil & gas operations
- Mining
- Fire and rescue services
- Hazardous material response (HAZMAT)

Key Features

- Premium coconut shell activated carbon
- Optimized impregnation technology for multi-gas protection
- High adsorption capacity for toxic gases and vapors
- Excellent chemisorption performance
- High hardness and low dust generation
- Uniform particle size for low breathing resistance
- Long operational life
- Low moisture content
- Manufactured under strict quality control

Protection performance depends on the specific RespiraX™ grade, impregnation chemistry, contaminant concentration, humidity, temperature, and operating conditions. Product selection should comply with applicable respiratory protection standards (e.g., NIOSH, EN 14387, or other relevant standards) and be validated for the intended application.

Typically Effective Against -

RespiraX impregnated activated carbons are engineered to adsorb and/or chemically react with a wide range of hazardous gases and vapors. Depending on the impregnation formulation, grades are available for protection against:

- Organic vapors (solvents, hydrocarbons)
- Hydrogen sulfide (H₂S)
- Sulfur dioxide (SO₂)
- Chlorine (Cl₂)
- Hydrogen chloride (HCl)
- Ammonia (NH₃)
- Amines
- Formaldehyde
- Mercury vapor (Hg)
- Phosphine (PH₃)
- Acid gases
- Selected toxic industrial chemicals (TICs) and many more..

Standard Specifications

Iodine Value	1100 mg/g
Surface Area	1150 m2/g
Apparent Density	0.49 gms/cc
Moisture Content	6% max
Available Mesh sizes	12x20, 20x50, 30x60 etc
Impregnation :	
A - for Organic Vapors & Gases	4.0% min
B - for Acidic Gases	3.0% min
E - for Sulfur containing gases	1.0% min
K - for Ammonia & Amines	0.2% min

Packaging Options

1100 lbs, 55 lbs, 27.5 lbs bags, plastic drums etc..
Custom packaging available



Storage & Handling

Store in a cool, dry and well-ventilated area away from direct sunlight, moisture and incompatible chemicals. Keep containers tightly sealed until use. Refer to the latest Safety Data Sheet (SDS) before handling or using this product. Appropriate personal protective equipment should be used during handling.



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