bysorb™

TECHNICAL DATA SHEET

Product: Bysorb Earth

Features & Benefits

- Superior adsorption of pollutants and PFAS
- Supports environmental land restoration
- Consistent performance in various soils
- Low ecological footprint

Bysorb Earth is an advanced activated carbon designed for soil remediation applications. It targets a wide range of soil contaminants, including emerging concerns like PFAS, making it a critical component for soil decontamination in environmental remediation projects. This product offers high adsorption performance while supporting sustainable remediation practices. **Bysorb Earth** is produced using various biomass materials, with a range of iodine numbers, and surface areas to suit specific application needs.

Applications:

Contaminated site remediation	Industrial land redevelopment	PFAS-contaminated soil treatment
Agricultural land reclamation	Landfill and waste management sites	Oil and chemical spill response

Specifications

Bysorb Earth	
Raw Material Options	Coconut Shell, Almond Shell, Wood, and Coal
Iodine Number	700–1000 mg/g
Methylene Blue Adsorption	≥ 200 mg/g
Moisture Content	4–15 wt%
Ash Content	5–15 wt%
Surface Area	700–1000 m²/g
Apparent Density	0.45–0.65 g/mL
CTC (Carbon Tetrachloride Activity)	40–60%
Hardness	85–99%
Available in Mesh Sizes	• GAC: 12x40, 8x30, 8x16, 4x8 • PAC: 200, 325 • Pellets: 2-6mm
Packaging Options	20 KG and 500 Kg bags

*Specification values are for informational purposes only and represent typical ranges. For exact specifications, please contact Bygen.
*Determined using relevant ASTM standard unless stated otherwise
*Determined using in-house methodology

Safety Message: Wet-activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed. For more information, contact info@bygen.com.au

Application Benefits:

Bysorb Earth effectively extracts pollutants, including PFAS, from soil through its superior adsorption capacity. It facilitates the restoration of impacted land, supporting environmental goals and helping rehabilitate land for productive use. It performs reliably across diverse soil types and conditions. Furthermore, its sustainable production aids in reducing the ecological footprint of remediation projects.

Targeted Contaminants:

- Hydrocarbons: Removes residues from fuel and oil spills.
- Pesticides: Adsorbs lingering agricultural chemicals.
- Solvents: Captures industrial runoff compounds.
- Organic Pollutants: Eliminates degradation byproducts.
- Aromatic Substances: Neutralises odorous and harmful compounds.
- PFAS (Per- and Polyfluoroalkyl Substances): Targets persistent "forever chemicals" in soil, offering a robust solution for emerging contamination challenges.

Key Properties

- Soil-Optimised Design: Penetrates soil matrices for effective contaminant removal, including PFAS.
- Secure Binding: Prevents re-release of adsorbed pollutants, ensuring long-term stability.
- Robust Durability: Withstands demanding remediation conditions.
- Sustainable Advantage: Utilises renewable resources, reinforcing its role in environmentally sound land recovery.
- High Adsorption Rate: Ensures efficient pollutant uptake in soil, including hard-to-treat PFAS compounds.
- Field Versatility: Adapts to varying remediation scales and methods, from small sites to large-scale PFAS-contaminated areas.

Certifications

- ISO 9001:2015
- ISO 14001:2015

Additional certifications may be available upon request.

Safety Message: Wet-activated carbon can deplete oxygen from air in enclosed spaces. If use in an enclosed space is required, procedures for work in an oxygen deficient environment should be followed. For more information, contact info@bygen.com.au