

Activated Hardwood Carbon is a high-surface-area adsorbent produced from hardwood via high-temperature steam activation. Its extensive micropore network (typically 500–1,500 m²/g) provides broad-spectrum adsorption of organic compounds, pigments, and nonpolar contaminants. Used widely in decolorizing, deodorizing, oil purification, and as a filter media component.

SECTION 1: PRODUCT IDENTIFICATION

Product Name	Activated Hardwood Carbon
CAS Number	7440-44-0
Chemical Name	Activated Carbon; Activated Charcoal; Wood-Based Activated Carbon
Source	Hardwood — steam-activated at high temperature
GHS Classification	WARNING — Eye Irritation Cat 2B (H320), STOT SE Cat 3 (H335), Combustible Dust (H232)
Supplier	Cannagas Supply 97 Turnpike Rd, Westborough, MA 01581 877-710-1965 Sales@canna-gas.com

SECTION 2: PHYSICAL & CHEMICAL PROPERTIES

Physical State	Black powder or granules	Bulk Density	~250–600 g/L (grade-dependent)
Odor	Odorless	Specific Gravity	~1.9–2.1
pH (slurry)	6–8 (near neutral)	Solubility	Insoluble in water
Surface Area	Typically 500–1,500 m ² /g (BET)	Moisture Content	Typically <5% as supplied
Pore Volume	High micropore volume — source-dependent	Ash Content	Typically <8% (hardwood source)
Flammability	COMBUSTIBLE DUST — H232	Appearance	Black powder or granules

SECTION 3: PERFORMANCE & APPLICATIONS

Adsorption Mechanism	Physical adsorption (van der Waals forces) into micropore network. Broad-spectrum non-polar and slightly polar compound removal.
Adsorption Targets	Pigments; terpenes (caution — may remove desirable terpenes); odors; non-polar organic contaminants; some pesticides; mycotoxins.
Decolorizing Use	Effective at removing dark pigments and oxidation products from oils, extracts, and organic liquids.
Combined Use	Commonly paired with bentonite clay (T-5 or T-41) for comprehensive purification: clay targets polar/ionic impurities, carbon targets non-polar organics. Recommended ratio: 10% carbon to clay.
Typical Dosage	1–5% w/w of feed material. Optimize based on target contaminant and desired result. Too much carbon may strip desirable compounds (terpenes, cannabinoids).
Caution	Activated carbon is non-selective — may adsorb desirable terpenes and cannabinoids in addition to contaminants. Use minimum effective dose and optimize carefully.
Compatibility	Compatible with ethanol, hydrocarbon solvents, and oil matrices. Not suitable as primary desiccant (does not selectively adsorb water).

SECTION 4: STORAGE & HANDLING

■ **SAFETY NOTE: COMBUSTIBLE DUST (H232):** Fine activated carbon dust can form explosive mixtures with air. Eliminate all ignition sources when handling. Do not use compressed air to blow/transfer dry carbon. Activated carbon may deplete oxygen in sealed containers — ensure adequate ventilation.

Storage Sealed containers in cool, dry, well-ventilated area. Keep from ignition sources and strong oxidizers.

Shelf Life Indefinite in sealed, dry storage.

Incompatibles Strong oxidizers (chlorine, peroxides), strong acids — avoid contact.

SECTION 5: SAFETY SUMMARY

GHS Signal Word WARNING

Key Hazards H232: Combustible dust. H320: Causes eye irritation. H335: Respiratory irritation.

SDS Reference Full SDS available. CHEMTREC: 1-800-424-9300.

DISCLAIMER: The information provided in this Technical Data Sheet is based on data believed to be accurate as of the issue date. Cannagas Supply makes no warranty regarding fitness for a particular purpose or accuracy of the information herein. Users are responsible for determining suitability for their specific application. Always refer to the Safety Data Sheet (SDS) for complete safety and regulatory information.