

Carbon filters are used to remove toxic gases, hazardous fumes, and odors. These filters are constructed from high-quality carbon pellets and durable chemical-resistant cases.

Carbon filters trap gaseous pollutants through the process of adsorption wherein gas molecules adhere to the surface of the carbon granules. When carbon is activated, its surface and adsorption site increases allowing it to adsorb more contaminants.

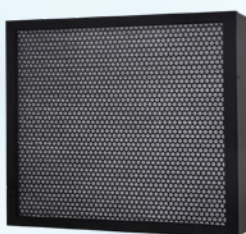
Esco Nanocarb™ activated carbon filters are constructed to ensure maximum filter efficiency, retention capacity, and operator protection. There are 8 types of filters available that can remove specific chemical groups and are compatible with Esco's Ascent Ductless Fume hood product line.



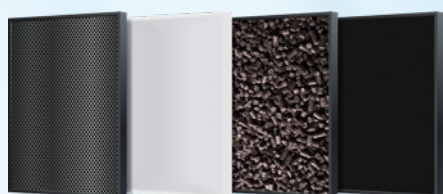
TABLE 1. TYPES OF ESCO NANOCARB™ FILTERS

| Code | Name | Suitable Applications |
|------|------------------------------|---|
| A | Standard Filter | All common laboratory chemicals, especially with organics. When no specific requirements are present, or when more than one type of chemical is used. |
| B | Acid Filter | Removal of inorganic and organic acid vapors and fumes. |
| C | Mercury Filter | Highly effective for removal of mercury vapor and compounds. (stable, non-volatile mercuric sulfide filter media). |
| D | Sulfur Filter | Removal of sulfur and sulfur-containing compounds. |
| E | Halogen Filter | Removal of fumes from halogen compounds like Chlorine, Fluorine, Iodine, Bromine, Astatine, etc. |
| F | Aldehyde Filter | Formaldehyde applications or when aldehydes are present. Hospital pathology and endoscopy applications. |
| G | Amine and Ammonia Filter | High-performance removal of ammonia and amines by chemisorption. |
| H | Ethers and Chloroform Filter | Removal of ethers and chloroform. |

UNIQUE FEATURES OF ESCO NANOCARB™ FILTERS:



Carbon Filter



Carbon Filter Assembly

- High-quality grade of raw materials to achieve the best balance of all performance factors.
- Continuous incoming quality control tests on all incoming activated carbon raw material procured.
- Optimized retention capacity (i.e., the total weight of chemicals the filter can retain, usually as a percentage of its weight).
- Generously sized filters with more activated carbon by weight to retain more chemicals and to last longer.
- Rigid, sheet metal construction coupled with a flat-packed bed to minimize dusting and ensures even airflow throughout the filter.
- Has a disposable, non-washable polyester fiber, 85% Arrestance, EU3 rated, pre-filter.
- A quick-changeout filter clamping mechanism allows filter replacements to be carried out with minimal tools; even filter clamping (perimeter, not point force) prevents leaks from occurring.
- Diffusion technology to ensure even filter loading.
- Filters are individually installed into each fume hood and certified at the factory before shipment.