

# CARBON FILTER EFFECTIVENESS



## GUIDANCE

AirBench is available with a range of carbon filtration options. The following table details the effectiveness of our standard 208EA carbon filtration (as used in 'E' and 'J' range AirBenches) on a range of substances.

For certain substances with a low efficiency (shown with a \*), we recommend our 'R' configuration using Chemisorb carbon with alumina / potassium permanganate additive.

C	Acetaldehyde	A	Dibromoethane	A	Human Odours	A	Octane
A	Acetic Acid	A	Dichloroethane	D	Hydrogen	A	Onions
A	Acetic Anhydride Acid	A	Dichlorobenzene	C	Hydrogen Bromide	A	Ozone
D	Acetilene	A	Dichlorodifluoro Ethane	C	Hydrogen Chloride	A	Paint Odours
B	Acetone	B	Dichlorodifluoro Methane	C	Hydrogen Cyanide	A	Palmitic Acid
D	Acetylene	A	Dichloroethane	C	Hydrogen Fluoride	A	Paradichlorobenzene
B	Acrolein	A	Dichloroethyl Ether	B	Hydrogen Iodide	B	Pentane
B	Acryaldehyde	A	Dichloroethylene	C	Hydrogen Sulphide - *	A	Pentanone
A	Acrylic Acid	A	Dichloromethane	A	Incense	B	Pentylene
A	Adhesives	B	Dichloromonofluoro Methane	A	Indole	B	Pentyne
A	Amines	A	Dichloropropane	B	Industrial Waste	A	Perchloroethylene
D	Ammonia - *	B	Dichlorotetrafluoro Ethane	A	Iodine	A	Perfumes
C	Amyl Acetate	A	Diesel Fumes	A	Iodoform	A	Perspiration
B	Amyl Alcohol	B	Diethyl Amine	A	Iodoform 3 Isoprene	A	Petrol
B	Amyl Ether	A	Diethyl Aniline	B	Iso Butane	A	Phenol
A	Aniline	B	Diethyl Ketone	A	Isopropyl	B	Phosgene
A	Animal Odours	B	Diethylamine	A	Isopropyl Acetate	A	Plastics
A	Antiseptics	B	Dimethyl Amine	A	Lactic Acid	C	Propane
D	Arsine - *	A	Dimethyl Sulphate	A	Leather	A	Propionic Acid
A	Athyl	A	Dimethylaniline	A	Lubricants	B	Propionylbehyde
A	Benaldehyde	A	Dimethylsulfate	A	Medicinal Odours	A	Propyl
A	Benzene	A	Dioxane	A	Mercaptan	A	Propyl Acetate
A	Bromine	A	Dipropyl Ketone	A	Mesityl Oxide	A	Propyl Chloride
C	Butadiene	A	Disinfectants	D	Methane	A	Propyl Mercaptan
A	Butyl	A	Embalming Products	D	Methanol (Methyl) - *	B	Propylene
A	Butyl Acetate	A	Essential Oils	B	Methyl	B	Purifying Odours
A	Butyl Chloride	D	Ethane	B	Methyl Acetate	A	Putrescine
B	Butylene	B	Ether	A	Methyl Acrylate	A	Pyridine
B	Butyraldehyde	A	Ethyl Acetate	B	Methyl Alcohol	A	Rancid Oils And Fats
A	Butyric Acid	A	Ethyl Acrylate	B	Methyl Bromide	A	Resins
A	Camphor	B	Ethyl Alcohol	A	Methyl Butylketone	A	Rubber
A	Caproaldehyde	B	Ethyl Amine	A	Methyl Cellosolve	C	Slaughterhouse Smells
A	Caprylic Acid	A	Ethyl Benzene	B	Methyl Chloride	B	Soap
A	Carbolic Acid	B	Ethyl Bromide	A	Methyl Chloroform	A	Stale Odours
D	Carbon Dioxide	B	Ethyl Chloride	B	Methyl Ether	A	Styrene Monomer
B	Carbon Disulphide	B	Ethyl Formate	A	Methyl Ethylketone - **	C	Sulphur Dioxide - *
D	Carbon Monoxide	C	Ethyl Mercaptan	B	Methyl Formate	B	Sulphur Trioxide
A	Carbon Tetrachloride	A	Ethyl Silicate	A	Methyl Isobutylketone	A	Sulphuric Acid
A	Cellosolve	B	Ethylamine	A	Methyl Mercaptan	A	Tar Odours
A	Cellosolve Acetate	A	Ethylbenzene	A	Methylcyclohexanol	A	Tetrachloro Ethane
B	Chloride	D	Ethylene - *	A	Methylcyclohexanone	A	Tetrachloro Ethylene
B	Chlorine	A	Ethylene Chlorohydrin	A	Methylene Chloride	A	Tetrahydrothrophene
A	Chloro Nitropropane	A	Ethylene Dichloride	A	Monochlorobenzene	C	Tobacco Smoke
A	Chloro Picrin	B	Ethylene Oxide	B	Monofluorolrichloro Methane	A	Toilet Odours
A	Chlorobenzene	A	Eucalyptol	A	Naphtha (Coal Tar)	A	Toluene
A	Chlorobutadiene	A	Faecal Odours	A	Naphtha (Oil)	A	Toluidine
A	Chloroform	B	Farmyard Smells	A	Napthalene	A	Trichloro Ethylene
A	Chloronitropropane	A	Fertiliser	D	N-Decane	A	Turpentine
A	Chloropicrin	B	Film Developing	D	N-Heptane	A	Urea
A	Chloroprene	C	Fish Odours	A	Nicotine	A	Uric Acid
B	Cigarette Smells	A	Floral Odours	A	Nitrotoluene	A	Valeraldehyde
A	Cleaning Solvents	B	Fluorotrichloromethane	B	Nitric Acid	A	Valeric Acid
A	Cooking Odours	C	Formaldehyde - *	A	Nitrobenzene	A	Valeric Aldehyde
A	Creosote	B	Formic Acid	A	Nitroethane	A	Varnish
A	Cresol	C	Freon	C	Nitrogen Dioxide - *	A	Vehicle Exhaust
A	Crontonaldehyde	A	Gangrene Smell	A	Nitroglycerine	A	Ventilation Systems
A	Cyclohexane	A	Garlic	A	Nitromethane	A	Vinegar
A	Cyclohexanol	A	Heptane	A	Nitropropane	B	Vinyl Chloride
A	Cyclohexanone	A	Heptylene	A	Nitrotoluene	B	Wood Alcohol
A	Cyclohexene	B	Hexane	D	N-Nonane	A	Xylene
A	Degreasing Solvents	C	Hexylene	D	N-Octane		
A	Deodorants	A	Hospital Odours	D	N-Octylene		
A	Detergents	A	Household Smells	A	Nonane		

A: Very effective - 20-50%  
B: Good - 5-20%

C: Weak - 5% max  
D: Poor - Use alternative solution

Weight of pollutant adsorbed / Weight of carbon - Before efficiency diminishes  
\* - indicates substance suitable for special duty carbon filtration - see "R" configuration  
\*\* - standard carbon tends to off-gas - recommend 'R' configuration