

Clearly of Sweden Datasheet

Granular activated carbon is a highly adsorbent material used to remove contamination from water. Activated carbon has been known as a miracle filter media by many researchers because of its unique ability to remove offensive tastes, odors, color, chlorine and volatile organic chemicals, pesticides and trihalomethanes (a group of suspected carcinogens). Briefly, activated carbon acts like a sponge, with a large surface area to absorb contaminants in the water. The surface area of one pound of activated carbon is equal to 125 acres. Many scientists believe this is a result of an affinity that these chemicals have for carbon because of Van Der Waal forces. Activated carbon is the preferred treatment and method recommended by the EPA to remove a host of potentially hazardous and possibly carcinogenic chemicals in drinking water. A partial list of chemicals that are reduced or removed by activated carbon are:

The chart shows partial contaminants regulated for public water systems by the Safe Drinking Water Act, and the maximum contaminant levels, source, health effects and treatment options for each.

Organic	MCL	Source/Industrial occurrence	Health effect	Treatment
Chlorobenzene	0.1	Used as a solvent for paint and metal manufacturing. Also used in insecticides.	Affects nervous system, kidneys and liver.	Activated carbon
CIS-1,2 Dichloroethylene	0.07	Used as an industrial solvent in the manufacturing of dyes, perfumes and lacquers	Affects liver, and a nervous and circulatory systems. Probable cause of cancer.	Activated carbon
Dibromochloropropane	0.0002	Soil fumigant on soybeans, and cotton. Canceled in 1997.	Cancer	Activated carbon
Dioxin	0.00000003	Chemical production by-product; impurity in herbicides.	Affects lungs, liver and kidney. Probable cause of cancer.	Activated carbon
Epichlorohydrin	0	Used in epoxy resins and coating, and in flocculants.	Affects nervous system, kidney and liver.	Activated carbon
Ethlbenzene	0.7	Used in the manufacture of gasoline, insecticides and asphalt	Probable cause of cancer	Activated carbon
Ethylene Dibromide	0.00005	Used as a gasoline additive and soil fumigant.	Affects nervous system, kidneys and liver.	Activated carbon
Monochlorobenzene	0.01	Used in manufacture of pesticides and as a metal cleaner and industrial solvent.	Cancer	Activated carbon
PAHs	0.0002	Coal tar coating, burnings organic matter, volcanoes, fossil fuels.	Cancer	Activated carbon
Phthalate (di(2-ethylhexyl))	0.006	PVC and other plastics.	Affects skin and liver. Causes nausea. Probable cause of cancer.	Activated carbon
Polychlorinated Biophenyts (PCBs)	0.0005	Used in electrical transformers.	Affect nervous system, kidneys and liver.	Activated carbon
Styrene	0.01	Used in manufacturing plastic, resins and foams.	Affects nervous system. Probable cause of cancer and anesthesia	Activated carbon
Tetrachloroethylene	0.005	Used in dry cleaning and as a degreasing agent for metals. Also used for manufacturing rubber, waxes, paints and inks.	Affects nervous system, liver and kidneys. Causes narcosis. Irritant to respiratory system.	Activated carbon
Toluene	1	Used in gasoline, paint thinners, lacquers and	Cancer	Activated carbon,

		adhesives.		ozonation
Total Trihalomethanes (THM's): Chloroform Bromoform Bromodichloromethane Dibromochloromethane	0.01	Formed when water containing organic matter is treated with chlorine.	Affects nervous system and muscles. Probable cause of cancer.	Activated carbon, aeration, ultra filtration (20-90%), RO (20-90%)
1,1 Dichloroethylene	0.007	Used in manufacturing dyes, plastic, perfumes, paints and adhesives	Affects kidneys and liver and can cause nausea.	Activated carbon
1,1,2-Trichloroethane	0.005	Solvent in rubber products, chemical production waste.	Kidney, liver, nervous system damage	Activated carbon, aeration
1,1,1-Trichloroethane	0.02	Used in manufacturing of pesticides, plastic and metals.	Affects nervous system. Causes narcosis and probably cancer.	Activated carbon
1,2 Dichlorobenzene	0.6	Used in the manufacturing of fumigants, insecticides, waxes, resins, rubber and asphalt	Affects lungs, liver and kidneys.	Activated carbon
1,2 Dichloroethane	0.005	Used in the manufacturing of gasoline, paint, varnish, metal degreasers and insecticide fumigants	Damage kidney and liver can cause nausea	Activated carbon
1,2 Dichloropropane	0.005	Used in insecticide fumigants, dry cleaning fluids and in manufacturing of resins, waxes and petroleum products	Affects lungs, liver and kidneys.	Activated carbon
1,2,4-Trichlorobenzene	0.07	Herbicide production; dye carrier.	Liver, kidney damage	Activated carbon, aeration
1,4 Dichlorobenzene	0.075	Used in moth repellent, germicides, pesticides and soil fumigants.	Affects nervous system, liver and kidneys. Probable cause of cancer.	Activated carbon
Acrylamide	0	Flocculants used in sewage and wastewater treatment.	Affect nervous system, probable cause of cancer.	Activated carbon
Adipates	0.4	Synthetic rubber, food packaging, cosmetics.	Decreased body weight; liver and testes damage.	Activated carbon, aeration
Benzene	0.005	Used in fuels and as a solvent in manufacturing pharmaceuticals, plastics, pesticides and paints. Often traced to leaking underground storage tanks.	Leukemia, anemia and possibly cancer	Activated carbon
Trans-1,2 Dichloroethylene	0.1	Used as an industrial solvent in the manufacturing of dyes, perfumes, lacquers and rubber.	Affects liver, and nervous and circulatory systems	Activated carbon, ozonation with UV irradiation
Trichloroethylene	0.1	Used in dry cleaning and as a degreasing agent.	Irritates body tissue. Affects nervous	Activated carbon

		Also used for manufacturing rubber, paints, adhesives, resins, oils and fumigants.	system. Probable cause of cancer.	
Vinyl Chloride	0.005	Used as a plastic adhesive and refrigerant. The main component of PVC pipe	Affects nervous system. Probable cause of cancer.	Activated carbon
Xyienes	0.002	Used in manufacturing paint, ink, petroleum and detergents.	Affects nervous system, kidneys, lungs, liver and mucous membranes.	Activated carbon
<b>Pesticides</b>				
Aldicarb Aldicarb Sulfone Aldicarb Sulfoxide Carboturan	10 0.003 0.002 0.004	Agricultural insecticide	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer.	Activated carbon
Chlordane	0.04	Used on rodents, insects, birds. Restricted since 1980.	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer	Activated carbon
Endrin	0.0002	Agricultural insecticide.	Liver, kidneys, heart damage.	Activated carbon
Heptachlor	0.0004	Agricultural insecticide. Converts to expoxide by soil and water organisms	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer.	Activated carbon
Heptachlor Expoxide	0.0002	Pesticide production by-product.	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer.	Activated carbon
Hexachlorobenzene	0.001	Pesticide production by-product.	Cancer	Activated carbon
Hexachlorocyclop - entadiene	0.05	Agricultural insecticide.	Cancer	Activated carbon, aeration
Lindane	0.0002	Agricultural insecticide.	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer.	Activated carbon
Methoxychlor	0.04	Insecticide used on apples, potatoes, tomatoes.	Affects nervous system, respiratory system, kidneys and liver. Probable cause of cancer.	Activated carbon
Oxamyl		Agricultural insecticide.	Kidney damage.	Activated carbon
<b>Herbicides</b>				
2,4-D 2,4,5-TP (silver) Alachlor Alrazine	0.07 0.05 0.002 0.003	Agricultural herbicides	Affect nervous and reproductive system, respiratory system, kidneys, liver and heart. Causes anesthesia. Probable cause of cancer.	Activated carbon
Dalapon	0.2	Herbicide used on orchards, beans, coffee, lawn, roads and railway.	Liver, kidney damage.	Activated carbon

Dinoseb	0.007	Runoff of herbicide from crop and non crop applications.	Thyroid, reproduction organ damage.	Activated carbon
Diquat	0.02	Runoff of herbicide on land and aquatic weeds.	Liver, kidneys, eye effects.	Activated carbon
Endothall	0.01	Used on crops, land and aquatic weeds.	Liver, kidney and gastrointestinal damage.	Activated carbon
Glyphosphate	0.7	Used on grass, weeds, brush	Liver, kidney damage	Activated carbon
Pentachlorophenol	0.001	Agricultural herbicide and wood preservative.	Affects nervous and reproductive system, respiratory system, kidneys, liver and heart. Causes anesthesia. Probable cause of cancer.	Activated carbon
Picloram	0.5	Used on broadleaf and woody plants.	Kidney, liver damage.	Activated carbon
Simazine	0.004	Used on grass sod, some crop, aquatic algae.	Cancer.	Activated carbon
The contaminants or other substances removed or reduced by this unit are not necessarily in your water.				