Activated Carbon

General contaminant removal capabilities.

Contaminants Effectively Removed

Chlorine

(Water additive used to control microbes)

Sodium Hypochlorite

(From natural erosion & used in water treatment)

Commercial Additives

- Cresol
- Dyes
- Xylene

- Ketones
- Phenol
- Toluidine
- Toluene
- Disinfectants
 - Calcium Hypochlorite
 Chlorophenol

PCBs (Environmental pollutants)

Pesticides

Bleach

- Herbicides
 Insecticides
- Methyl Bromide

Defoliants

- Solvents
- Amyl Acetate Butyl Acetate
- Chloroform
- Diesel Fuel
- Glycols
- Methyl Ethyl Ketone
- Nitrobenzene
- Oxalic Acid
- Benzene
- Butyl Alcohol
- Chlorobenzene
- Gasoline
- Hydrochloric Acid
- Naphtha
- Oil (Dissolved)
- Organic Esters
- Trichloroethylene Turpentine

TTHM (Total Trihalomethanes) (By-product of drinking water chlorination) **Pharmaceutical By-Products**

• Chloral • lodine Isopropyl Alcohol

Tannins (Food & wine by-products) Tar Emulsion (Topical medication by-product)

Undesirable Odors

- Chlorinous or bleach odor
- Earthy or grassy odors
- Fishy odor
- Fruity odor
- Mustv odor
- · Pool, bleach or geranium odor

Undesirable Taste

- · Bleach or chlorine taste
- Garlic taste
- Medicinal taste
- Plastic Taste
- Rubber Hose Taste
- · Rusty or Metallic taste

Likely Source Of Odor Contamination

Addition of chlorine as a disinfectant Geosmin produced by algae 2t, 4c, 7c-decatrienal produced by algae.

Aldehydes produced by ozonation of water for disinfection 2-Methylisoborneol (MIB) produced by algae

Addition of chlorine and ammonia as a disinfectant (chloramines)

Likely Source Of Taste Contamination

Addition of chlorine as a disinfectant

Methane gas resulting from the decomposition of organic matter Phenols from industrial waste or Chlorophenols

Addition of chlorine as a disinfectant

Addition of chlorine and ammonia as a disinfectant (chloramines) Iron & manganese in the ground

Limited Contaminant Reduction

Fluoride

Hydrogen Bromide

Precipitated Iron

Precipitated Sulfur

Contaminants Reduced

Acetic Acid (Water chlorination by-product)

Detergents

Heavy Metals (Chromium, lead, copper, zinc and cadmium)

Hydrogen Selenide (Similar to arsenic)

Hydrogen Sulfide (Responsible for "rotten egg" odors)

Lead (Erosion of natural deposits, corrosion of household plumbing systems)

Nitric Acid (Strong antioxidant)

Soaps

Vinegar

Contaminants Significantly Reduced

Alcohols (Commercial by-products)

Antifreeze (Poisonous products)

Chloramine

(Water additive used to control microbes)

Commercial Additives

- Chlorophyll
- Ethyl Alcohol
- Ethvl Ether
- Mercaptans
- Propionaldehyde
- Propyl Acetate
- Propyl Chloride • Tartaric Acid
- Citric Acid
- Ethyl Chloride
- Ethylamine
- Organic Acids
- Propionic Acid Propyl Alcohol
- Sulfonated Oils
- Xanthophyll

 Methyl Alcohol Methyl Chloride

Acetone

Solvents

- Acetaldehyde
- Methyl Acetate
- Ozone
- · Organic Salts

Disinfectants

- · Lactic Acid
- Potassium Permanganate
- Radon (Gaseous element)

DISCLAIMER: The use of this product in and of itself does not necessarily guarantee the removal of the contaminants and pathogens listed above from water. Effective contaminant and pathogen reduction is dependent on the complete system design and on the operation and maintenance of the system.