ANSI/NSF Standards for Drinking Water Treatment Units

These standards represent the most common standards established by NSF for domestic drinking water systems and shower filters.

NSF/ANSI Standard 42: Aesthetic Effects

Units are evaluated for material safety, structural integrity and accurate product literature. This standard primarily deals with Particulate and Chlorine removal, appearance and Taste and Odor claims.

Chlorine

A chlorine reduction claim means the system reduces the concentration of chlorine in the water. This category is broken down into classes that represent a certain level of Chlorine removal.

Class I - 75% or greater Chlorine reduction
Class II - 50% - 74% Chlorine reduction
Class III - 25% - 49% Chlorine reduction

Particulates

A performance claim for Particulate removal means the system removes particles of a certain size based on the following classes:

Class I - Reduces 85% of particles 0.5 to < 1 microns in size
Class II - Reduces 85% of particles 1 to < 5 microns in size
Class III - Reduces 85% of particles 5 to < 15 microns in size
Class IV - Reduces 85% of particles 15 to < 30 microns in size
Class V - Reduces 85% of particles 30 to < 50 microns in size
Class VI - Reduces 85% of particles equal to or greater than 50 microns in size

NSF/ANSI Standard 53: Health Effects

Units are evaluated for material safety, structural integrity and accurate product literature. This standard is concerned with contaminants that may pose a health risk such as:

Lead
Volatile Organic Compounds (V.O.C.'s)
Inorganic Chemicals (nitrate, mercury, asbestos, lead, fluoride, etc.)
Cysts
Radon
Turbidity
Pesticides and Herbicides
Trihalomethanes (THM's)
MTBE

Volatile Organic Chemicals (V.O.C.'s)

A performance claim for V.O.C. reduction means the system reduces the concentration of all of the following 50 contaminants. Some of these chemicals can be tested individually for performance claims.

Disinfection By-Products	Chemicals
chloropicrin	benzene
haloacetonitriles (HAN)	carbon tetrachloride
bromochloroacetonitrile	chlorobenzene
dibromoacetonitrile	1,2-dichloroethane
dichloroacetonitrile	1,1-dichloroethylene
trichloroacetonitrile	cis-1,2-dichloroethylene
haloketones (HK)	1,2-dichloropropane
1,1-dichloro-2-propanone	cis-1,3-dichloropropylene
1,1,1-trichloro-2-propanone	ethylbenzene
trihalomethanes	hexachlorobutadiene
chloroform	hexachlorocyclopentadiene

bromoform	styrene
bromodichloromethane	1,1,2,2-tetrachloroethane
dibromchloromethane	tetrachloroethylene
tribromoacetic acid	toluene
Pesticides	trans-1,2-dichloroethylene
carbofuran	1,2,4-trichlorobenzene
dibromochloroproane (DBCP)	1,1,1-trichloroethane
o-dichlorobenzene	1,1,2-trichloroethane
p-dichlorobenzene	trichloroethylene
endrin	xylenes
ethylene dibromide (EDB)	**Herbicides**
heptachlor (H-34, Heptox)	alachlor
heptachlor epoxide	atrazine
lindane	2,4-D
methoxychlor	dinoseb
	pentachlorophenol
	simazine
	2,4,5-TP (silvex)

Cysts

A performance claim for cysts indicates the system reduces the concentration of parasitic cysts by at least 99.95%. The cysts included in this claim are Cryptosporidium, Giardia, Toxoplasma and Entamoeba.

Turbidity

A claim for turbidity reduction means the system removes fine particulate matter that makes water appear cloudy to a level below the U.S. EPA Maximum Contaminant Level.

Lead

A performance claim for lead reduction demonstrates the system's ability to reduce the concentration of lead below the U.S. EPA Maximum Contaminant Level.